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Robert D. Morrison
Texas A&M University

Dave Jackson
The University of Texas Rio Grande Valley

Joo Y. Jung
The University of Texas Rio Grande Valley, joo.jung@utrgv.edu

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THE COMPETITIVE ENVIRONMENT OF U.S. COMMUNITY BANKING: A NATIONWIDE SURVEY OF RURAL AND METROPOLITAN COMMUNITY BANKERS

Robert D. Morrison, Texas A&M University

Dave Jackson, University of Texas Rio Grande Valley

Joo Jung, University of Texas Rio Grande Valley

ABSTRACT

Prior empirical research found that in the United States, rural community banks earn higher profits than their metropolitan counterparts and have lower risk loan portfolios as well. Investigating community bank failures since 2000 we find support for the competition-fragility view that increased competition in banking correlates with an increase in bank failures based on the finding that preponderance of US bank failures are community banks in metropolitan areas where they face direct competition from multiple large banks. This study tests seven hypotheses using a nationwide survey of community bankers. The results indicate metropolitan bankers perceive an intense competitive environment where it is difficult to get their message to potential new clients while also losing their most creditworthy business clients to mega-banks. Bankers across geographic regions suggest that economies of scale in technology and regulatory compliance drive merger and acquisition activity and it will continue despite the shocking reduction of over 70% of banks since deregulation through mergers, acquisitions, and failures. Prior research also suggests that larger banks extend less credit to small businesses. If true, fewer metropolitan community banks will further restrict the bank credit available to new businesses and existing microenterprises, especially in the metropolitan areas where 86% of the US population now live. This study provides additional support for the position that US community banks are not a homogenous group and studies need to consider the geographic scope of operation. Based on these results and the relevant literature, we provide suggestions for community bankers, entrepreneurs, regulators, and future research.

INTRODUCTION

Historically, locally owned banks played a very meaningful role in funding nascent entrepreneurs and ongoing microenterprises; the businesses that contribute most to new job creation in the US. However, dramatic changes occurred in the US Banking industry over the past 40 years with the elimination of Depression-era regulatory restrictions of both the geographic area of operation and scope of financial services banks can offer. These regulatory changes fueled a surge of merger activity in the financial services industry that peaked at about 600 mergers per year in the late 1990s and declined to around 200 per year from 2000 to 2020. In

a quest to cover the nation or particular regions, large publicly traded banks acquired banks across the nation with the vast majority of branches, approaching 90%, being in metropolitan areas. Likewise, larger privately held banks or bank holding companies acquired or merged with smaller banks. This resulted in a 73% decrease in the number of bank charters from the peak of 17,901 in 1985 to the 4,746 FDIC insured banks operating in the third quarter of 2022. Although the 4,308 community banks make up 91% of FDIC insured banks, they hold only 12% of US bank assets. Nonetheless, community banks play an important role in the US economy because of the role they play in funding microenterprises (FDIC, 2012, 2020; DeYoung, 1998; Goldberg & White, 1998) and small businesses continue to employ about half of the people in the US private sector (CHI Research, 2003; Headd, 2015; Kobe, 2007, SBA, 2019). Small business and commercial real estate (CRE) lending demonstrates this important role. Despite holding only 15% of US loans, community banks hold 36% of the nation's small business loans and 30% of the nation's CRE loans, which is up from 15% prior in 2012 (FDIC CBS, 2020). However, Balla et al. (2019) argue that CRE lending involves more risk for community banks. In recent years, the percentage of community banks originating SBA 7(a) loans has also increased from 38% to 46%. New and young businesses are the primary creators of jobs in the US (Wiens & Jackson, 2014) and one point of particular interest is the reduction of community banks and the decline in the number of new business startups in the US. For example, in recent years, the small business closure rate exceeded the small business startup rate for the first time in 35 years (Clifton, 2015).

Politicians, pundits, government administrators, and researchers have expressed concern that the decline in new business startups and lack of growth in small business job creation relates to the decline in community banks because of the changing competitive landscape and regulatory burdens on small banks after the Great Recession (e.g., Adams & Gramlich, 2014; Blair, 2014; Rutledge, 2014; Jagtiani & Lemieux, 2016; Jagtiani & Maingi, 2018; Dayen, 2019; Hughes, Jagtiani, Mester & Moon, 2019;). This discussion arose during the primary debates of the 2016 presidential election and the bipartisan supported Economic Growth, Regulatory Relief, and Consumer Protection Act became law in 2018. However, while it reduced some regulatory burdens, critics of the bill argue it will facilitate more mergers of *stadium banks*, a moniker for large regional banks that came out of the Senate Bill 2155 debates, and some evidence suggests that is occurring (Dayen, 2019; Harper-Widicus & Jenkins, 2019).

Community bank survival in metropolitan areas is important because more of the US population is migrating to cities (Arzaghi & Rupasingha, 2013). In fact, the 2020 census reveals that 86% of the US population now lives in metropolitan areas, and this is where community banks encounter the greatest competition from the massive nationwide and regional banks; sometimes referred to as *mega-banks*. Therefore, we need a better understanding of how deregulation has changed the competitive environment of community banking. Although this study focuses on community banks, the true concern is the secondary impact on small business, especially microenterprises and nascent entrepreneurs. If community banks continue to fail and merge, serious questions arise about the adequacy of funding available for small businesses, especially in metropolitan areas. The historical evidence indicates that small new banks lend more heavily to the smallest of businesses and that lending declines as banks mature and total assets exceed \$200 million (DeYoung, 1998; Golberg & White, 1998).

The dramatic decline in the number of community banks and the significant reduction in new bank charters has drawn the interest of government and academic researchers (e.g., Adams & Gramlich, 2014; Emmons, 2021; FDIC CBS, 2012; FDIC CBS 2020; Hassan & Hippler, 2015); however, these and other studies only examined industry-wide bank performance after deregulatory restructuring. As Claessens and Laeven (2004) emphasize, “As small banks may operate more in local markets that are less competitive, studying all banks may lead to a distorted measure of the overall competitiveness of a banking system, especially in countries with a large number of banks, such as the United States” (p. 547). DeYoung, Glennon, Nigro, and Spong (2012) examined the default rates on over 18,000 SBA loans between 1984 and 2001, a period before the use of small business credit scoring was widespread, and found that loans made by rural businesses default substantially less often than loans made by urban banks and/or in urban areas. Morrison and Escobari (2020) compared the performance of community banks in rural counties with community banks in metropolitan areas for the period 2000-2014 and found that the profit of metropolitan community banks is approximately 30% lower on average and that since the financial crisis metropolitan banks have higher loan portfolio risk based on FDIC data. The finding that rural banks have higher profits is consistent with Gilbert and Wheelock’s (2013) suggestion that rural community banks’ niche helps them remain more competitive than those in urban markets. When viewed with the FDIC CBS 2020 data that community banks’ percentage share of national CRE loans have remained relatively stable, approximately 30%, while the community bank percentage of national bank assets have declined from approximately 30% to 12% shows that CRE lending has become a larger portion of community bank loan portfolios. In fact, about one-quarter of community banks now identify as CRE specialists and as of year-end 2019, these CRE specialist loans accounted for 41% of aggregate community bank assets and 58% of aggregate community bank loans. These CRE specialist banks are predominately in metropolitan areas; therefore, the finding of higher loan portfolio risk aligns with the argument by Balla et al. (2019) that an increase in CRE lending also increases loan portfolio risk. However, the 2020 FDIC Community Bank Study finds that community banks in metropolitan counties with two demographic extremes—lower median age and high migration inflows—such as Atlanta, Austin, Nashville, and Orlando, from 2011 through 2019 experienced growth, higher profitability, and more business lending. This suggests that being a community bank in the right big city at the right time remains profitable. This is logical given that a significant influx of a young, educated population would create a demand for new housing, retail, and services that would fuel both business and CRE lending.

This study first compares bank failure rates of rural and metropolitan community banks from 2000 through 2022 and then provides the contribution of a nationwide survey to gauge community bank management team members’ perceptions on competitive intensity, merger and acquisitions activity in community banking, small business lending, and new bank startups. Based on evidence from Morrison and Escobari (2020) that bank performance differs in rural and metropolitan areas, we compare the perceptions of community bankers in metropolitan counties to the perceptions of community bankers in rural counties. Whereas analysis of secondary data provides insight into what has already occurred, survey data provides some insight into the perceptions practitioners have about the current environment and events in the future. If

community bank practitioners view that the merger activity will continue and that new bank startups are not feasible, the extant literature suggests that there are serious implications for small business funding.

LITERATURE REVIEW

Historically, locally owned banks played a very meaningful role in funding nascent entrepreneurs and ongoing microenterprises; the businesses that contribute most to new job creation in the US. However, dramatic changes occurred in the US Banking industry over the past 40 years with the elimination of Depression-era regulatory restrictions of both the geographic area of operation and scope of financial services banks can offer. Banks grow in two ways, generating more deposits and lending or through mergers and acquisitions (M&A); however, most bank growth occurs through M&A (Valverde & Humphrey, 2004). These regulatory changes fueled a surge of merger activity in the financial services industry that peaked at about 600 mergers per year in the late 1990s and declined to around 200 per year from 2000 to 2020. In a quest to cover the nation or particular regions, large publicly traded banks acquired banks across the nation with most branches, approaching 90%, being in metropolitan areas. Likewise, larger privately held banks or bank holding companies acquired or merged with smaller banks. This resulted in a 73% decrease in the number of bank charters from the peak of 17,901 in 1985 to the 4,771 FDIC insured banks operating in the second quarter of 2022. While merger announcements and analysis highlight the potential for the cost savings through economies of scale (Dermine, 1999; Valverde & Humphrey, 2004), academic studies have found minimal change and that on average mergers neither lower nor raise unit costs overall (Berger, 1998; Berger & Humphrey, 1992; Rhoades, 1993,1998). However, Valverde and Humphrey (2004) did identify a 0.50% savings and a 4% increase in return on assets from 22 bank mergers in Spain from 1986-2000 but note that the range was from about +11% to -11% and that strong determinants apparently come from things that are difficult to measure such as data processing and back-office operations where prior merger experience likely enhances cost savings.

Although community banks make up 92% of FDIC insured banks, they hold only 12% of US bank assets. Nonetheless, community banks play an important role in the US economy because they provide most of the funding to microenterprises (DeYoung, 1998; Goldberg & White, 1998) and small businesses continue to employ about half of the people in the US private sector (CHI Research, 2003; Headd, 2015; Kobe, 2007, SBA, 2019). Small business and commercial real estate (CRE) lending demonstrates this important role. Despite holding only 15% of US loans, community banks hold 36% of the nation's small business loans and 30% of the nation's CRE loans, which is up from 15% prior in 2012 (FDIC CBS, 2020). However, Balla et al. (2019) argue that CRE lending involves more risk for community banks. In recent years, the percentage of community banks originating SBA 7(a) loans has also increased from 38% to 46%. New and young businesses are the primary creators of jobs in the US (Wiens & Jackson, 2014) and one point of particular interest is the reduction of community banks and the decline in the number of new business startups in the US. For example, in recent years, the small business

closure rate exceeded the small business startup rate for the first time in 35 years (Clifton, 2015).

Politicians, pundits, government administrators, and researchers have expressed concern that the decline in new business startups and lack of growth in small business job creation relates to the decline in community banks because of the changing competitive landscape and regulatory burdens on small banks after the Great Recession (e.g., Adams & Gramlich, 2014; Blair, 2014; Rutledge, 2014; Jagtiani & Lemiex, 2016; Jagtiani & Maingi, 2018; Dayen, 2019; Hughes, Jagtiani, Mester & Moon, 2019;). This discussion arose during the primary debates of the 2016 presidential election and the bipartisan supported Economic Growth, Regulatory Relief, and Consumer Protection Act became law in 2018. However, while it reduced some regulatory burdens, critics of the bill argue it will facilitate more mergers of *stadium banks*, a moniker for large regional banks that came out of the Senate Bill 2155 debates, and some evidence suggests that is occurring (Dayen, 2019; Harper-Widicus & Jenkins, 2019).

Community bank survival in metropolitan areas is important because more of the US population is migrating to cities (Arzaghi & Rupasingha, 2013). In fact, the 2020 census reveals that 86% of the US population now lives in metropolitan areas, and this is where community banks encounter the greatest competition from the massive nationwide and regional banks; sometimes referred to as *mega-banks*. Therefore, we need a better understanding of how deregulation has changed the competitive environment of community banking. Although this study focuses on community banks, the true concern is the secondary impact on small business, especially microenterprises and nascent entrepreneurs. If community banks continue to fail and merge, serious questions arise about the adequacy of funding available for small businesses, especially in metropolitan areas. The historical evidence indicates that small new banks lend more heavily to the smallest of businesses and that lending declines as banks mature and total assets exceed \$200 million (DeYoung, 1998; Golberg & White, 1998). While credit constrained small businesses also utilize trade credit (Carbo-Valverde, Rodriguez-Fernandez & Udell, 2016) and non-bank lending has increased in recent years (e.g., Han, 2017; Zabala & Josse, 2014), they do not provide all the services that community banks provide to small business clients.

The dramatic decline in the number of community banks and the significant reduction in new bank charters has drawn the interest of government and academic researchers (e.g., Adams & Gramlich, 2014; Emmons, 2021; FDIC CBS, 2012; FDIC CBS 2020; Hassan & Hippler, 2015); however, these and other studies only examined industry-wide bank performance after deregulatory restructuring. As Claessens and Laeven (2004) emphasize, “As small banks may operate more in local markets that are less competitive, studying all banks may lead to a distorted measure of the overall competitiveness of a banking system, especially in countries with a large number of banks, such as the United States” (p. 547). DeYoung, Glennon, Nigro, and Spong (2012) examined the default rates on over 18,000 SBA loans between 1984 and 2001, a period before the use of small business credit scoring was widespread, and found that loans made by rural businesses default substantially less often than loans made by urban banks and/or in urban areas. Morrison and Escobari (2020) compared the performance of community banks in rural counties with community banks in metropolitan areas for the period 2000-2014 and found that the profit of metropolitan community banks is approximately 30% lower on average and that

since the financial crisis metropolitan banks have higher loan portfolio risk based on FDIC data. The finding that rural banks have higher profits is consistent with Gilbert and Wheelock's (2013) suggestion that rural community banks' niche helps them remain more competitive than those in urban markets. When viewed with the FDIC CBS 2020 data that community banks' percentage share of national CRE loans have remained relatively stable, approximately 30%, while the community bank percentage of national bank assets have declined from approximately 30% to 12% shows that CRE lending has become a larger portion of community bank loan portfolios. In fact, about one-quarter of community banks now identify as CRE specialists and as of year-end 2019, these CRE specialist loans accounted for 41% of aggregate community bank assets and 58% of aggregate community bank loans. These CRE specialist banks are predominately in metropolitan areas; therefore, the finding of higher loan portfolio risk aligns with the argument by Balla et al. (2019) that an increase in CRE lending also increases loan portfolio risk. However, the 2020 FDIC Community Bank Study finds that community banks in metropolitan counties with two demographic extremes—lower median age and high migration inflows—such as Atlanta, Austin, Nashville, Orlando, from 2011 through 2019 experienced growth, higher profitability, and more business lending. This suggests that being a community bank in the right big city at the right time remains profitable. This is logical given that a significant influx of a young, educated population would create a demand for new housing, retail, and services that would fuel both business and CRE lending.

This study first compares bank failure rates of rural and metropolitan community banks from 2000 through 2022 and then provides the contribution of a nationwide survey to gauge community bank management team members' perceptions on competitive intensity, merger and acquisitions activity in community banking, small business lending, and new bank startups. This study only tests the hypothesis that more bank failures occur in metropolitan areas and does not examine the reasons for those failures because it is beyond the scope of this study and extant research provides insight factors associated with bank failure (e.g., Estrella, Park & Peristiani, 2000; Martinez-Miera & Repullo, 2010; Martin, 1977; Meyer & Pifer, 1970; Nguyen, Parsons & Argyle, 2021). Based on evidence from Morrison and Escobari (2020) that bank performance differs in rural and metropolitan areas, we compare the perceptions of community bankers in metropolitan counties to the perceptions of community bankers in rural counties. Whereas analysis of secondary data provides insight into what has already occurred, survey data provides some insight into the perceptions practitioners have about the current environment and events in the future. If community bank practitioners view that the merger activity will continue and that new bank startups are not feasible, the extant literature suggests that there are serious implications for small business funding.

HYPOTHESES

The percentage of community banks in metropolitan and rural counties is equal, 50.5% and 49.5% respectively. If the increased competition in metropolitan areas has not contributed to an increase in bank failure, then there would be no significant difference in the percentage of banks failing in rural versus metropolitan areas. Based on the SCP paradigm, the competition-

fragility literature, and dominant bank hypothesis (see, Carbó et al., 2009, Carletti & Hartmann, 2003; Canoy et al., 2001), given the lower HHI in metropolitan areas, which indicates less concentration and more competition, and the presence of branches of large nationwide banks and large regional banks in the metropolitan areas one would expect metropolitan banks to fail more frequently than rural banks.

***Hypothesis 1:** Since 2000, a significantly higher percentage of bank failures occurred in metropolitan areas than in rural areas.*

Given the concerns expressed about the reduction of credit to small businesses caused by the reduction in the number of community banks through mergers and failures and the dramatic drop in new bank charters, a better understanding of the perceptions of management team members at incumbent banks could provide valuable insight into future structural change in the industry. Although historical data provides insight into what has happened, it may not predict the future. The need for mixed methods research exists when one data source does not explain the phenomena fully (Creswell & Plano-Clark, 2011). In their study of new bank charters from 1980 to 2013, Adams and Gramlich (2014) found a “structural shift to lower levels of bank formation post-crisis. This effect could be due to regulation—suggesting new charters may not rebound when the economy recovers—but there are a number of other plausible explanations” (p.4). Porter (1980) suggests that the intensity of rivalry can vary significantly. In highly concentrated markets, there may be intense rivalry between only a few firms or there may be gentleman-like competition. The concentration of both rural and metropolitan bank markets is greater relative to other industries; however, metropolitan markets are less concentrated and community banks are competing against dominant bank rivals, often labeled *megabanks* by practitioners and business news pundits. Based on the SCP paradigm, the competition-fragility literature, and dominant bank hypothesis, given the lower HHI in metropolitan areas:

***Hypothesis 2:** Management team members of community banks in metropolitan areas will rate the level of competitive intensity significantly higher than management team members of community banks in rural counties.*

It is reasonable to assume that large nationwide and regional banks would seek to increase the size of the bank’s deposit base and loan portfolio. A good strategy to pursue might be to target, or *cherry pick*, the large depositors and large credit-worthy commercial clients of the smaller locally owned banks and entice them to move their accounts.

***Hypothesis 3:** Management team members of community banks in metropolitan areas will indicate a significantly higher level of cherry picking activity than management team members of community banks in rural counties.*

During the interview portion of the research, all management team members working in metropolitan community banks brought up the difficulty of getting their message to potential new customers. Although each person phrased the issue somewhat differently, one individual

summarized it well, “It is like whispering at a rock concert when every 10 minutes there is an advertisement on the TV or radio from Bank of America, Chase, or Wells Fargo. How do you compete with that?”

***Hypothesis 4:** Compared to management team members in rural community banks, management team members of community banks in metropolitan areas will rate their marketing capabilities significantly lower than the marketing capabilities of competitors in their service area.*

Empirical evidence suggests that a merger of banks with strategic similarity leads to post-merger gains in performance because of the matching of managerial skills and competencies adding value (Ramaswamy, 1997). As a result, community banks in metropolitan areas would arguably view mergers with other community banks as a strategy to continue to leverage the relationship lending technology while moving toward economies of scale in administrative functions, regulatory compliance, and information technology to compete better with large banks.

***Hypothesis 5:** Management team members of community banks in metropolitan areas will view the likelihood of a merger in a 5-to-10-year timeframe significantly higher than management team members of community banks in rural counties.*

The decline of new bank charters in recent years and the virtual absence of new bank charters since the financial crisis are troubling given the role new banks play in financing small businesses. Although Adams & Gramlich (2014) find that new bank charters correlate positively with interest rates, the decline in the number of small banks through merger and failure gives cause to believe that the competitive landscape is so hostile, particularly in metropolitan areas, that incumbent management team members no longer view starting a new bank as a profitable venture.

***Hypothesis 6:** Management team members of community banks in metropolitan areas will view the success of starting a new bank in their market when interest rates return to historical norms significantly lower than management team members of community banks in rural counties do.*

However, given the increased cost of regulatory compliance and information systems implementation and support, management team members of community banks may view the success of a new bank charter in their market as unlikely because of the inability to draw sufficient business away from incumbent banks to overcome the high startup cost. Therefore, the alternative is:

***Hypothesis 6a:** No significant difference exists in how management team members at community banks in metropolitan and rural areas view the likely success of a new bank charter in their market.*

Finally, the important implications of the findings of this study relate to the potential decline in the ability of entrepreneurs, especially those involved in microenterprises, to have

access to debt financing. This is important because microenterprises employ the majority of people in the US and make a very significant contribution to new job creation. Previous research has clearly established the importance of community banks, especially smaller community banks, in providing financing to small businesses in the US. All banks must manage risk in their loan portfolio. The empirical evidence is clear that new and very small businesses are at greater risk of failing or closing, even if it does not meet the strict definition of failure (Shane, 2008). To offset these riskier loans, banks must have less risky loans in the loan portfolio. If community banks in metropolitan areas lose the more credit-worthy commercial clients to nationwide and regional banks, then it would inhibit their ability to extend loans to the new business startups and the less transparent small businesses.

***Hypothesis 7:** Management team members at community banks in metropolitan areas will indicate that competition for the most credit-worthy clients results in less lending to new businesses and the less financially transparent small business.*

Hypothesis 1 evaluates the difference in failure rates between banks in rural and metropolitan areas. A significantly higher failure rate in metropolitan areas provides evidence supporting the competition-fragility view that increased competition leads to increased bank failures. Hypotheses 2 through 7 evaluate survey data collected from practicing community bankers. This provides valuable insight into the perceptions practitioners have about the current environment and events in the near future.

METHODOLOGY

We adapted the Competitive Intensity and Marketing Capabilities scale items from previous studies (Auh & Menguc, 2005; Jaworski & Kohli, 1993; Pecotich, Hattie, and Low; 1999; Weerawardena, 2002) to align with the terminology for this industry. We developed the remaining scales based on interviews and expert input following DeVellis (2003) and followed with a pilot study and exploratory and confirmatory factor analysis (see, Hair, Black, Babin, & Anderson, 2010). Appendix A contains the survey questions. The bank names, postal addresses, and website addresses of all community banks came from the most recent FDIC quarterly dataset, and we divided it into datasets for the main bank being in a metropolitan or rural county. Several hundred entries contained the bank's website address, so we visited those sites and collected 1,201 email addresses of presidents, vice-presidents, and loan officers. From the remaining banks, we developed randomized lists by assigning a randomly generated number to each bank and sorting based on that column. We divided them into groups of 255, just over the 250 minimum bulk-mailing rate quantity. The study objective was obtaining a minimum of 250 responses, similar to other nationwide studies, with a minimum of 100 from both areas. We established a website to administer the survey and emailed the link, with an explanation of the study, to all email addresses obtained. Simultaneously, we mailed out paper letters to the presidents of a portion of the banks directing them to go to the survey website and waited two weeks to see how many responded. We then continued to mail out batches of 255 letters to the

next sets on the list and saw a greater response rate from metropolitan bankers, so we increased the number of mailings to rural bankers. The response rate was approximately 10% and the respondents held positions of president, vice-president, branch manager, or loan officer in banks from 48 different states.

The distribution of rural and metropolitan community banks is essentially equal at 49.5% to 50.5% so over 83% of failures being in metro counties leaves little doubt that the difference is significant, nonetheless, we performed a binominal test. The evaluation of hypotheses 2 through 7 uses a t-test of the difference in the means of the sum of item scores on each individual scale. To assure alignment with the underlying assumptions of the t-test (see, Havlicek & Peterson, 1974) we conducted tests for the equality of variance between metropolitan and rural banks for each of the summated values on each scale, as well as examining histograms and performing tests for distribution normality. On all tests for distribution normality, the Shapiro-Wilk test and the Shapiro-Francia test, we could not reject the null hypothesis of the distribution being normal ($p > 0.05$) and this aligned with what we observed in the histograms. The variance equality tests, the traditional F test and Levene's robust test statistic, revealed that the Competitive Intensity (CI) scale was the only scale where the variance was significantly different between groups. Therefore, the t-test for mean difference on the CI scale used Satterwaite's adjustment of degrees of freedom; however, without adjustment the difference remained significant. Table 1 provides the t-test results. As a robustness check, we performed nonparametric tests, the Kolmogorov-Smirnov and the Wilcoxon (Mann-Whitney) test and both provided confirmation of the t-test results in H2 through H7.

RESULTS

Bank Failure

Based on information from the FDIC Bank Failure Report, of 563 banks that failed from January 1, 2000, through December 31, 2022, only one, Doral Bank in Puerto Rico, was not an FDIC designated community bank. Only 93 of the 563 (16.51%) were not in a metropolitan county. While there are significantly more bank branches of both community and large banks in metropolitan areas, approximately 49.5% of the community banks operating across this period were in rural counties, therefore, 83.49% of failed banks being in metropolitan areas differs significantly from what one would expect by chance (Binominal, $p < 0.000001$). This provides strong support for Hypothesis 1 and for the competition-fragility view that an increase in bank competition leads to an increase in bank failures. Table 1 contains the results and summary data for all hypotheses tests in this study.

Interviews

The motivation for this study arose from the participation of the first author in a project to assist women and minority entrepreneurs in a specific metropolitan area. The project involved conversations with loan officers from both local banks and the four largest mega-banks. Private

comments from locally owned banks provided insight into the challenging competitive environment and the difficulty faced in retaining the largest and most creditworthy local businesses and of how that impacted the ability to loan to startups and the smallest businesses. One local community bank official provided a position announcement from a mega-bank on an online job board that stated the job required locating businesses in the service area that had over ten years in operation, strong financial performance, and were not currently doing business with the bank or one of its national competitors. This is obviously cherry picking of established commercial clients away from locally owned banks and spark curiosity about this occurring nationwide.

This study included formal interviews prior to developing the survey scales (see Appendix A); however, during the visits to solicit participation in the pilot study, some bankers shared comments we include here. While there was no structure to those short interactions, they provided additional candid insight. The subjects in the semi-structured interviews were 11 male and 4 female officers, branch managers, board of director members, or loan officers at community banks ranging in age from 24 to 62. The responses were similar; therefore, it was easy to identify themes. The interview data aided in developing the survey instrument; however, we do not use the interview data hypotheses testing. The following is a general summarization of the interviews. It is important to note that the generalization of information from the limited sample of interviewees could lead to false conclusions. Qualitative researchers must accept this reality.

Every community banker, rural and metropolitan, repeatedly brought up excessive regulatory compliance burdens as part of the response to individual questions. Bankers consistently mentioned the Dodd-Frank Act and the Consumer Financial Protection Bureau. Some bankers in metropolitan areas informed me that their institution had completely exited the home mortgage lending market. One stated that, “They [regulators] are running the small banks out of the home mortgage market because you need a team of compliance specialist and multi-million-dollar systems to stay out of trouble.”

As one might expect, all interviewees expressed confidence that the bank they worked at could successfully navigate the constantly changing regulatory environment and survive by providing the outstanding personalized service that is the cornerstone of relationship banking. However, they expressed concern for the community banking industry at large. Those interviewed provided no sign they believed the competitive or regulatory environment would become significantly less hostile for community banks despite political actions to lower regulatory requirements for community banks. One comment left by a banker in a metropolitan area who participated in the survey provides candid insight, “The only reason that we are still in business is lower overhead cost and good customer service to loyal customers who are willing to pay a little extra so we can offer a slightly higher rate on deposits.”

Survey Results

Hypothesis 2 relates to how community bank management team members view the level of competitive intensity and indicate support for Hypothesis 2 in that metropolitan community

bankers perceive that the competitive environment is significantly more intense, $t(174) = 9.77$, $p < 0.000$ (one-tail $M > R$) $d = 1.31$. Levene's test showed unequal variances ($F = 2.11$, $p < 0.000$) so we applied Satterwaite's adjustment by changing degrees of freedom from 255 to 174. Hypothesis 3 examines the perception that large nationwide and regional banks are actively targeting the biggest depositors and most credit-worthy commercial borrowers currently doing business with locally owned banks. Although the means are significantly different, $t(255) = 7.39$, $p < 0.000$ (one-tail $M < R$) $d = 0.93$, between metropolitan bankers and rural bankers and provides support for Hypothesis 3, the mean for metropolitan bankers is lower than expected. In the interviews with metropolitan community bankers, they emphasized the importance of retaining the largest and most established commercial clients and the difficulty in being able to compete with the interest rates and services that the largest banks can offer.

The survey results do not appear as strong as the emphasis in the interviews. This may demonstrate a need to improve the measurement scale, or maybe the limited sample size and geographic scope of the interviews skewed the perception. Nonetheless, the survey results provide convincing evidence that community bankers in metropolitan areas perceive that nationwide and regional banks engage in cherry picking behavior.

It is not surprising that community bankers in metropolitan areas perceive the bank's marketing capabilities, Hypothesis 4, to be lower than the marketing capabilities of the banks they compete against in the area they service. The nationwide and regional banks have large marketing departments and spend billions on advertising. Although that advertising also reaches customers who live in rural areas, most rural counties do not have a branch of one of the nationwide or regional banks. Rural bankers compete against banks that have relatively the same level of marketing expertise. Therefore, there is a significant difference, $t(255) = 8.58$, $p < 0.000$ (one-tail $M < R$) $d = 1.09$, in how community bankers in metropolitan and rural counties perceive their banks marketing capabilities as compared to the banks that they compete against, and this provides support for Hypothesis 4. However, beyond marketing capabilities, metropolitan community bankers must accept that banking customers possibly perceive a level prestige and security in national bank brands they do not perceive in smaller locally owned banks.

Arguably, perceptions on merger and acquisition, Hypothesis 5 and new bank startups, Hypothesis 6 and 6a, should correlate in that if one perceives that a community bank can profit and grow organically without the need to merge then the local economic environment should also be able to support a new bank. The results for merger and acquisition, $t(255) = 10.28$, $p < 0.000$ (one-tail $M > R$) $d = 1.30$, and new bank startups, $t(255) = 5.37$, $p < 0.000$ (two-tail) $d = 0.683$ are significantly different between rural and metropolitan community bankers. Community bankers in metropolitan areas view the likelihood of more community bank mergers higher and this provides support for Hypothesis 5. It is interesting that, on average, even rural community bankers viewed the likelihood of merger slightly above the midpoint of on the scale. This provides some additional support for the suggestion that regulatory compliance is driving the continuing merger activity (e.g., Lux & Greene, 2015; Peirce, Robinson, & Stratmann, 2014). In Peirce, Robinson, & Stratmann's (2014) survey, approximately 25% of respondents indicated they were contemplating mergers.

However, despite viewing the likelihood of a merger higher, metropolitan community bankers also view the likelihood of a new bank succeeding higher. This seems counterintuitive; however, it is noteworthy that while M&A perceptions were above scale midpoint, showing that respondents perceive more M&A activity in the future, the perception of new bank success was well below the midpoint on the scale for new bank startups. Nonetheless, metropolitan bankers view the new bank potential somewhat more positively. Therefore, the results do not support Hypothesis 6, $t(255) = 5.37, p = 1.000$ (one-tail M<R) $d = 0.68$. Hypothesis 6a is that there is not a significant difference in the perceptions between rural and metropolitan community bankers

Table 1				
Scale Scores, Binominal, and t-test Results				
H 1. Metro versus Rural Bank Failure		M(n=470) >R(n=93) Binominal ***		
Scale	Scale Range	Area	Mean	Std. Err.
H 2. Competitive Intensity 1-tail M>R n=257 R=107 M=150	0 - 600	Rural	273.22	11.50
	232-337			
	356-452	Metro	402.67***	6.59
H 3. Cherry Picking 1-tail M>R n=257 R=107 M=150	0 - 400	Rural	197.27	7.61
	140-252			
	225-307	Metro	265.75***	5.64
H 4. Marketing Capabilities 1-tail M<R n=257 R=107 M=150	0 - 500	Rural	256.25	7.75
	214-302			
	112-210	Metro	170.86***	6.33
H 5. Merger and Acquisition 1-tail M>R n=257 R=107 M=150	0 - 400	Rural	212.72	4.35
	161-255			
	230-334	Metro	271.26***	3.68
H 6. New Bank Startup 1-tail M<R n=257 R=107 M=150	0 - 500	Rural	119.93	4.52
	81-155			
	117-182	Metro	153.94	4.13
H 6a. New Bank Startup 2-tail M=R n=257 R=107 M=150	0 - 400	Rural	119.93	4.52
	81-155			
	117-182	Metro	153.54***	4.13
H 7. Small Business Lending 1-tail M>R n=257 R=107 M=150	0 - 400	Rural	252.14	4.65
	210-298			
	192-290	Metro	251.91	4.04
Significance: *** 1% level, ** 5% level, * 10% level				
H 6 & 6a are not supported because Metro is higher, not lower, than Rural as hypothesized but the difference is significant. This was not expected. The findings of FDIC (2020) and the number of respondents to our survey from high-growth metro areas where community banks outperformed from 2010-2019 may explain this. However, the mean of both groups being well under the 250 midpoint of the scale supports that neither Metro nor Rural bankers feel starting a new bank is a good idea.				
The maximum value for each summated scale is the number of latent construct indicators multiplied by maximum scale value of 100 for each indicator and the range provides a reference to evaluate the relative level of responses.				

regarding the success of a new bank. Because there is a significant difference in the score on new bank startups between rural and metropolitan community bankers $t(255) = 5.37, p <$

0.000 (two-tail) $d = 0.68$, there is also no support for Hypothesis 6a. However, based on the scale mean scores being below the 250 midpoint, neither rural nor metropolitan bankers view the competitive environment favorable to a new bank in the area they serve. It is possible that community bankers in metropolitan areas see a large pie where even a small piece could provide sufficient returns to investors, whereas rural community bankers see a small pie and economic growth potential that does not support another competitor. This survey occurred before the December 2020 release of the updated FDIC Community Bank Study. After reading in that study that community banks in metropolitan areas with low median age and high levels of migration inflows had grown and performed well from 2011 through 2019, we reviewed the self-reported county location of our metropolitan respondents and found that several were from high-growth cities identified in the 2020 report. Therefore, it is likely that community bankers in these growing cities perceive that there is room for a new bank and those responses slightly skewed our results.

Finally, both metropolitan and rural community bankers perceive that small business lending has become somewhat more difficult. A score above the midpoint indicates that respondents perceive it is more difficult to underwrite loans to small businesses now than in past years. The means for rural and metropolitan bankers are only six points apart at approximately 14% above the midpoint and not significantly different, $t(255) = 0.93$, $p = 0.170$ (one-tail $R > M$), $p = 0.352$ (two-tail), $d = 0.12$. Therefore, there is no support for Hypothesis 7, and both metropolitan and rural community bankers perceive that lending to small businesses has become somewhat more difficult. Because rural and community bankers do not differ significantly in their perceptions of small business lending, this indicates that the perception of increased difficulty may be more because of regulatory compliance than competition from the large nationwide and regional banks. However, we must take some caution when interpreting these results.

Previous studies based on actual small business lending indicate that older and larger banks reduce the level of lending to small businesses. The extent of community bank merger activity, voluntary or because of regulatory and FDIC involvement, is self-evident. As banks merge, they increase in size. This survey measures the perceptions of lending to small businesses from people working in functioning community banks, and community banks view small business lending as a core competency. Admitting that it is becoming more difficult to attract and keep the commercial borrowers that are key to your institution's success is tantamount to professing that your institution will fail. As previously discussed in the interview results, the bankers interviewed did not express that they felt the situation was so dire where they worked, but they did express concern for the survival of the broader community banking sector. However, they indicated that the competition for the most credit-worthy commercial accounts was intense and that both competition and increased regulatory compliance requirements made it both more costly and difficult to lend to microenterprises and to startup businesses with little or no financial history. In addition, in the survey, metropolitan bankers indicated that continued merger activity is likely. Based on previous research that banks make fewer small business loans as bank size increases beyond \$200 million, mergers will only result in larger banks, more large banks and

fewer small banks will probably lead to further rationing of credit to small businesses as larger banks focus on large clients.

CONCLUSIONS

Despite holding only 12% of bank assets in the US, community banks play an important role in the US economy because they continue to provide a significant portion of the lending to small businesses. Over 83% of bank failures occurred in metropolitan areas despite the distribution of community banks being almost equal at 49.5% rural and 50.5% metropolitan. The higher failure rates of metropolitan community banks provide support for the competition-fragility view that increased competition in banking leads to more bank failures. The nationwide survey in this study indicates that metropolitan community bankers perceive the competitive environment to be more intense and that their marketing capabilities are inferior to the large nationwide and regional banks that they compete against. Community bankers perceive that the merger and acquisition activity will continue and that it is driven by the need to achieve economies of scale in technology and regulatory compliance. Based on previous research that larger banks extend less credit to small businesses (e.g., Berger & Frame, 2007; Berger, Rosen, & Udell, 2007; DeYoung, 1998; Golberg & White, 1998), this will further restrict the availability of bank credit to new businesses and existing microenterprises. Given that microenterprises employ most of the people in the US and contribute to new job creation (CHI Research, 2003; Headd, 2015; Kobe, 2007, SBA, 2019), there are serious economic implications.

Implications for Community Bankers

The data (e.g., Morrison & Escobari, 2020; FDIC, 2020) is clear that community banks in metropolitan areas face numerous challenges unless they are in those few cities that experience the demographic extremes of low median age and high migration inflows from 2011 through 2019. Metro area banks compete directly with banks that have a lower cost of capital due to access to the public debt and equity markets. The nationwide and regional banks also have their loan portfolio risk dispersed over a large geographic area and this mitigates economic downturns or phenomena such as drought and natural disasters that have limited geographic scope. Both facts make it difficult for community banks to compete against the nationwide and regional banks for the most credit-worthy business clients, those with a long business history, outstanding credit ratings, and proper financial records. Those highly desirable clients fit perfectly into the *cookie cutter* approach to lending used in large banks (Berger, Demirgüç-Kunt, Levine, & Haubrich, 2004; Cole, Goldberg & White, 2004). Based on the findings in this study, metropolitan community banks may find less hostile environments if they open branches in the rural counties in the region. There, they would compete less against nationwide and regional banks and more against banks of the same or smaller size. Given that Morrison & Escobari (2020) found that rural community banks are on average 30% more profitable and have lower risk loan portfolios, doing business in rural counties could enhance returns to metropolitan bank shareholders while reducing risk. For rural community bankers, the implications are that they

should resist the urge to go to the big city. The possibility of growing the bank's assets and loan portfolio by having access to larger populations exists, but the data indicates that the competition and operating costs in metropolitan areas result in lower returns to shareholders and riskier loan portfolios for community banks.

Given that recent research suggests that the merger of community banks to reach economies of scale in technology investments for loan processing and regulatory compliance may provide benefits (Hughes, Jagtiani, Mester, & Moon, 2019), community banks should focus on expansion and mergers across rural counties and avoid metropolitan areas. We note that a recent study by Hoskins and Abadi (2022), which focuses on branding and market share, advises against community banks expanding geographic scope. However, that study's dataset covers 1994 through 2018. Merger activity in the 1990s was significantly different at 600 per year versus 200 per year in the 2000s. The number of banks also decreased dramatically from over 15,000 to under 5,000. Combining those two periods may lead to results that do not reflect the competitive environment that community banks currently face. This is one reason this study begins in 2000. While Hoskins and Abadi (2022) included a variable for county population that could serve as a proxy for metropolitan counties, they did not specifically compare geographic expansion of banks in rural and metropolitan counties against each other. They also seem to argue that the expansion decision caused the deposit share reduction because the bank violated its core image of being locally focused. Could it be that the drop in deposit market share was because of the entry of mega-banks caused metropolitan community banks to expand into other counties in the state? We also question deposit market share as a measure of success instead of performance factors, such as profitability and loan portfolio risk. Focusing on competitor-oriented objectives, such as market share, can cause lower profitability (Armstrong & Collopy, 1996). We feel that a replication with controls for these variables may provide interesting insight into which community banks benefit from geographic expansion and into what types of counties.

Implications for Entrepreneurs

Aspiring entrepreneurs seeking loans need an awareness of the banking industry. Although it might seem logical that the biggest banks have the most money to lend and therefore would be the place most likely to lend to a new business, the data indicates that this is not the case. Big banks like to make big loans to big, established businesses that fit better into their cookie cutter approach to lending (Berger, Demirgüç-Kunt, Levine, & Haubrich, 2004; Cole, Goldberg & White, 2004). Previous studies provide convincing evidence that the larger a bank gets, the relatively fewer small business loans it makes (e.g., DeYoung, 1998; Goldberg & White, 1998), and that is counting loans up to \$1 million as a small business loan. The smaller community banks still provide a significant portion of the small business and CRE loans (FDIC CBS, 2020) despite that today they hold only a small fraction of the nation's deposits. Therefore, new and existing microenterprises should maintain banking relationships with community banks, maybe more than one community bank. It might even be advantageous for entrepreneurs in metropolitan areas to establish relationships with community banks in nearby rural counties,

given that, on average, those banks are more profitable and in recent years have less risky loan portfolios.

We cannot overstate the importance of entrepreneurs maintaining a good personal credit rating; however, lending to small businesses is a core activity for community banks and they are interested in serving small business clients (e.g., Berger & Udell, 2002; DeYoung, Hunter & Udell, 2004). There are even community banks in some metropolitan areas that promote the bank as being a *business bank* in that they specialize in serving small business needs on both the deposit and lending side. It is also important to understand that banks are businesses. A bank's success depends on managing the loan portfolio risk and banks that have higher ratios of loans and leases past due, loan loss allowances, and net write-offs will extend fewer new risky loans (DeYoung, Gron, Toran, & Winton, 2015). Given that lending to new and microenterprises is inherently risky based on the small business failure and closing rate, entrepreneurs should direct loan applications to the community banks with the lowest ratios of loans past due, loan loss allowances, and net write-offs. A review of the publicly available information from the FDIC website, possibly with the assistance of an accountant, can provide this information for all the banks in any county in the US.

Implications for Governments and Regulators

The decline in the number of US banks, from 17,901 to 4,771 over the thirty-seven-year period from 1985 to 2022 and the consolidation of the majority of deposits into just a few nationwide and regional banks is clear evidence that the banking industry in the US has changed. This study is not about the general benefits or detriments of bank consolidation. Rather, this study analyzes the competitive environment of community banking because of the important role they play in providing funds to the smallest of businesses. Nonetheless, based on the interview in this study, there are some points worthy of mention. Politicians and business press have mentioned the need to reinstate Glass-Steagall and break up the big banks. No community banker in this study stated that commercial banks being able to engage in investment banking caused him or her concern. However, the repeal of Glass-Steagall played a role in creating the mega-banks by allowing them to offer commercial banking, insurance, and investment banking. The part of deregulation that appears to have the biggest impact on community bankers is the end of restrictions on the geographic scope of branching. Community bankers, especially in metropolitan areas, complained that it was incredibly difficult to compete against the mega-banks because of the massive marketing campaigns, the lower cost of capital, the expertise in specialized lending such as agricultural and Small Business Administration lending, and the economies of scale they achieve in technology and on regulatory compliance. If government broke up the mega-banks in a fashion like the AT&T breakup in the 1980s, it would still leave community banks competing against enormous regional banks that would retain all the aforementioned advantages over small locally owned community banks. The issue is the size of banks that locally owned community banks compete against, not the number of competitors in a particular market, as US regulators continue to use when evaluating banking competition in local markets. Unfortunately, other than relieving some of the regulatory compliance burden for all

community banks, there does not appear to be a simple solution to make the competitive environment in metropolitan areas less hostile for community banks. Therefore, regulators must seek mechanisms to ensure that microenterprises and nascent entrepreneurs continue to have access to bank financing.

As politicians and government agencies continually emphasize, it is the microenterprise entrepreneurs that contribute most to job creation. With urban migration being a continuing phenomenon in the US, the metropolitan areas are in the most need of job creation. Both academic and government research convincingly indicate that small community banks lend to new businesses and existing microenterprises (e.g., FDIC, 2020, 2012; DeYoung, 1998; Goldberg & White, 1998). However, as this study demonstrates, the competitive environments in metropolitan areas are increasingly hostile to community banks. As a result, over 83% of bank failure occurs in metropolitan areas. Metropolitan community bankers also perceive that the merger and acquisition activity will continue as competitive pressures and technology and regulatory compliance costs drive the need to reach certain economies of scale to cover operating costs. Previous research indicates that the larger banks get, the less credit they extend to small businesses as a proportion of their overall portfolio (e.g., Holod & Peek, 2013; Berger, Demirgüç-Kunt, Levine, & Haubrich, 2004; Cole, Goldberg & White; 2004). Because community bank mergers increase bank size, this will have a negative impact on the bank financing available to microenterprises.

Again, the bankers interviewed and surveyed in this study indicated that competition was not an issue of how many banks were competing in the area, which is how US regulators measure competition in the banking sector. Although capitalistic societies view this as healthy because competition provides more and better products at lower prices, when small local banks compete against the large nationwide and regional banks, it results in less credit being extended to new businesses and existing microenterprises. Locally owned banks need to lend to the low risk, credit-worthy, established businesses to offset the riskier loans that they make to the new business startups and the financially opaque microenterprises that contribute significantly to job creation. With the nationwide and regional banks actively working to attract the low risk, credit-worthy, business clients away from community banks, as the results of this study suggest, community bankers are less able to lend to the higher risk microenterprises and nascent entrepreneurs.

Based on the input from community bankers, this study also indicates that the number of community banks will continue to decline, especially in the metropolitan areas. The Community Reinvestment Act of 1977 intended to encourage depository institutions to help meet the credit needs of communities in which they operate. However, the evidence from previous research is convincing that large banks, even if they remain community banks, avoid lending to new and financially opaque microenterprises (e.g., Holod & Peek, 2013; Berger, Demirgüç-Kunt, Levine, & Haubrich, 2004; Cole, Goldberg & White; 2004). As community banks continue to disappear or grow larger through mergers and acquisitions, lending to microenterprises will continue to shrink. The current reporting for the Community Reinvestment Act tracks loans under \$100,000, loans \$100,001 to \$250,000, and loans \$250,001 up to \$1 million as small business loans. However, those loan clients could be well-established businesses with dozens, or even hundreds, of employees and great credit ratings. Loans to microenterprises are often only in the tens of thousands of dollars. The issue is not that larger, well-established businesses do not need loans. The issue is that, given the importance of the microenterprise to employment and job creation; it

is important to ensure that the smallest of entrepreneurs continue to have access to bank financing. However, we must first have reliable data.

A logical first step would be to modify the reporting by somehow incorporating the number of employees and years commercial loan clients have been in business and reporting commercial loans under \$25,000, \$25,001 to \$50,000, and \$50,001 to \$100,000. Under the current reporting system, large banks can appear to be reinvesting in the community by making several \$99,000 small business loans in the community to businesses that have dozens of employees and have been in operation for decades. However, the data indicates these businesses do not contribute the most to new job creation. Evidence also suggests that large banks do not appear to lend to microenterprises, and based on the perceptions of community bankers, this study indicates that community banks in metropolitan areas will continue to decline. If this holds true, there may be a societal need for regulatory intervention that forces large banks to take on the risk and lend a certain percentage of deposits to microenterprises and new businesses in each metropolitan area where they have branches.

Understanding the impact of post-crisis regulatory compliance burdens on community banks is beyond the scope of this study; however, the results of this study align well with the findings of Lux and Greene (2015) and Peirce, Robinson, and Stratmann (2014). The fact that every community banker interviewed mentioned the increased burden of regulatory compliance suggests that there is a need for better understanding. Although small community banks are supposedly exempt from many of the requirements under Dodd-Frank (Hoskins & Labonte, 2015), bankers interviewed in this study unanimously stated that the regulatory compliance burden had increased because of post-crisis regulatory changes. A survey of 200 community bankers across 41 states by Peirce, Robinson, and Stratmann (2014) found that compliance costs and the number of employees working in compliance had risen at community banks since 2010. They also found that the Bureau of Consumer Financial Protection and the related new mortgage rules concern small banks. Similar to the findings in this study, their survey revealed some banks are rethinking the offering of residential mortgages and that approximately 25% of the banks surveyed were contemplating mergers. Lux and Greene (2015) found that despite community banks weathering the financial crisis better than many mid-sized counterparts did, since the passage of Dodd-Frank, community banks have lost market share at nearly double the rate of what it was during the crisis. They conclude community banks are a critical component of the US Banking sector, noting the role in small business lending, and may wither due to inappropriately designed regulations. To date, there has been little research on the impact of the 2018 Economic Growth, Regulatory Relief, and Consumer Protection Act to reduce the regulatory burden on community banks. It will take years for full implementation and the results to be measurable.

SUGGESTIONS FOR FUTURE RESEARCH

Competition from credit unions is not within the scope of this study; however, during interviews, metropolitan community bankers brought up competition from credit unions and some survey participants mentioned credit unions in the comments section. The same entities do not regulate or insure credit unions and commercial banks; therefore, the data on deposits and loans are not in the same databases, so direct comparison on a county level requires a significant amount of data conversion. According to the National Credit Union Administration, credit union

membership has grown in recent years and as of 2022, credit unions now have over 132 million members and credit union assets now exceed \$2.4 trillion. Interestingly, the first acquisition of a bank by a credit union occurred in 2012 and through 2019, there were 39 small banks acquired by credit unions (FDIC CBS, 2020). Although regulations limit the amount of commercial lending they can participate in, the National Credit Union Administration, the credit union regulator, approved a proposal to Part 723 that expands the credit union's ability to make Member Business Loans (MBLs). Like an approach taken in the U.K. (Talbot, Mac an Bhaird, & Whittam, 2015), representatives reintroduced The Credit Union Small Business Jobs Creation Act in the US House of Representatives in 2015 to lift the member business-lending cap from 12.25% to 27.5%. Therefore, while credit unions continue to be a competitive threat to community banks in the deposit and consumer lending markets; they are likely to become a more serious competitive threat in the small business lending market. This presents an interesting area for future research. As one community banker asked, "How do you compete against a nonprofit?". The use of Fintech by non-bank lenders to loan to small businesses is a relatively new phenomenon not addressed in this study. This represents a threat to community banks in both rural and metropolitan areas and warrants further research.

The findings in FDIC CBS 2020 that community bank CRE loans have remained about the same percentage of national CRE loans while community bank assets have decreased from 30% to 12% of national bank assets indicates that CRE loans are becoming a larger portion of community bank loans. Given that Balla et al. (2019) argue that CRE loans increase loan risk and Morrison and Escobari (2020) found that metropolitan community banks have riskier loan portfolios, this raises a question about metropolitan community banks possibly taking on CRE loans that the large banks reject. Alternatively, it could be those growing community banks in cities with low median age and high migration inflows that performed well from 2011 through 2019. Either way, the need for more insight into community bank CRE lending exists.

Future research should investigate if metropolitan bankers are aware of how they underperform their rural counterparts in terms of profit. While metropolitan bankers indicated that merger activity would continue and that the competitive environment in the area is intense, they also rated the feasibility of a new bank in the service area higher, but still not above the scale midpoint, than their rural counterparts did. A repetition of Hoskins & Abadi (2022) using profitability and loan portfolio risk variables and comparing geographic expansions of banks in metropolitan and rural counties after 2000 would be interesting. Finally, the impacts of the 2018 Economic Growth, Regulatory Relief, and Consumer Protection Act, which provided regulatory relief to community banks, is an area for research as it rolls out and the impacts become measurable.

LIMITATIONS

Although, there are implications that relate to small business credit availability, this study does not examine the difference in small business credit approval (Dennis, 2011) or the increase of credit availability to small businesses through non-bank institutions (Craig & Hardee, 2006; Rutledge, 2014), which includes online FinTech lending. This study included interview data

from only 15 community bankers and 257 respondents to a random national survey, a small portion of the approximately 5,000 community banks. Therefore, it is reasonable to believe that using these limited observations to infer general propositions could lead to false conclusions; qualitative researchers must accept this reality. This study did not specifically examine the effects of changes in credit union regulations that increase business lending or the 2018 Economic Growth, Regulatory Relief, and Consumer Protection Act. It will take a few years before researchers can measure the effect of those regulatory changes.

REFERENCES

- Adams, R. M., & Gramlich, J. P. (2014). Where are all the new banks? The role of regulatory burden in new charter creation *Finance and Economics Discussion Series*. Washington D.C.: Federal Reserve Board of Governors.
- Alexander, C. R., & Cohen, M. A. (1999). Why do corporations become criminals? Ownership, hidden actions, and crime as an agency cost. *Journal of Corporate Finance*, 5(1), 1-34.
- Armstrong, J. S. & Collopy, F. (1996). Competitor orientation: Effects of objectives and information on managerial decisions and profitability. *Journal of Market Research*, 33(2)188-199. doi:10.1177/002224379603300206
- Arzaghi, M., & Rupasingha, A. (2013). Migration as a way to diversify: Evidence from rural to urban migration in the U.S. *Journal of Regional Science*, 53(4), 690-711. doi: 10.1111/jors.12055
- Auh, S., & Menguc, B. (2005). Balancing exploration and exploitation: The moderating role of competitive intensity. *Journal of Business Research*, 58(12), 1652-1661. doi:/10.1016/j.jbusres.2004.11.007.
- Backman, M. (2015). Banks and new firm formation. *Journal of Small Business and Enterprise Development*, 22(4), 734-761, <https://doi.org/10.1108/JSBED-03-2013-0035>
- Balla, E., Mazur, L. C., Prescott, E. S., & Walter, J. R. (2019). A comparison of community bank failures and FDIC losses in the 1986–92 and 2007–13 banking crises. *Journal of Banking & Finance*. 106,1-5. doi:10.1016/j.jbankfin.2019.04.005.
- Bamford, C. E., Dean, T. J., & Douglas, T. J. (2004). The temporal nature of growth determinants in new bank foundings: implications for new venture research design. *Journal of Business Venturing*, 19(6): 899-919. <http://dx.doi.org/10.1016/j.jbusvent.2003.05.001>.
- Bamford, C. E., Dean, T. J., & McDougall, P. P. (2000). An examination of the impact of initial founding conditions and decisions upon the performance of new bank start-ups. *Journal of Business Venturing*, 15(3): 253-277. [http://dx.doi.org/10.1016/S0883-9026\(98\)00011-1](http://dx.doi.org/10.1016/S0883-9026(98)00011-1).
- Berger, A.N. (1998). The efficiency effects of bank mergers and acquisitions: A preliminary look at the 1990s data, in Y. Amihud & G. Miller (Eds.), *Bank Mergers and Acquisition*, 77-111. Kluwer Academic:Boston. doi: 10.1007/978-1-4757-2799-9_5.
- Berger, A. (2015). Small business lending by banks: Lending technologies and the effects of banking industry consolidation and technological change. In A. Berger, P. Molyneux & J. O. S. Wilson (Eds.), *The Oxford Handbook on Banking* (pp. 292-311). New York: Oxford University Press.
- Berger, A., Kashyap, A. K., & Scalise, J. M. (1995). The transformation of the U.S. banking industry: What a long, strange trip it's been. *Brookings Papers on Economic Activity*, 2(55-218).
- Berger, A., & Udell, G. F. (1996). Universal banking and the future of small business lending. In A. Saunders & I. Walter (Eds.), *Financial systems design: The case for universal banking*. Burr Ridge, IL: Irwin Publishing.
- Berger, A. N., Demirgüç-Kunt, A., Levine, R., & Haubrich, J. G. (2004). Bank concentration and competition: An evolution in the making. *Journal of Money, Credit & Banking*, 36(3), 433-451.
- Berger, A. N., Demsetz, R. S., & Strahan, P. E. (1999). The consolidation of the financial services industry: Causes, consequences, and implications for the future. *Journal of Banking & Finance*, 23(2-4), 135-194.
- Berger, A. N., & Frame, W. S. (2007). Small business credit scoring and credit availability. *Journal of Small Business Management*, 45(1), 5-22. doi: 10.1111/j.1540-627X.2007.00195.x
- Berger, A. N., Goulding, W., & Rice, T. (2014). Do small businesses still prefer community banks? *Journal of Banking & Finance*, 44, 264-278. doi: 10.1016/j.jbankfin.2014.03.016.
- Berger, A.N., and D.B. Humphrey (1992). Megamergers in banking and the use of cost efficiency as an antitrust defense. *Antitrust Bulletin*, 37, 541-600.

- Berger, A. N., Miller, N. H., Petersen, M. A., Rajan, R. G., & Stein, J. C. (2005). Does function follow organizational form? Evidence from the lending practices of large and small banks. *Journal of Financial Economics*, 76(2), 237-269. doi: 10.1016/j.jfineco.2004.06.003
- Berger, A. N., Saunders, A., Scalise, J. M., & Udell, G. F. (1998). The effects of bank mergers and acquisitions on small business lending. *Journal of Financial Economics*, 50(2), 187-229.
- Berger, A. N., Rosen, R. J., & Udell, G. F. (2007). Does market size structure affect competition? The case of small business lending. *Journal of Banking & Finance*, 31(1), 11-33. doi: 10.1016/j.jbankfin.2005.10.010
- Berger, A. N., & Udell, G. F. (1995). Relationship lending and lines of credit in small firm finance. *Journal of Business*, 68(3), 351-381.
- Berger, A. N., & Udell, G. F. (1996). Universal Banking and the future of small business lending. In: Saunders, A., Walter, I. (Eds.), *Universal Banking: Financial System Design Reconsidered*. Irwin: Burr Ridge, IL, pp. 559-627.
- Berger, A. N., & Udell, G. F. (2002). Small business credit availability and relationship lending: The importance of bank organisational structure. *Economic Journal*, 112(477), F32.
- Berlin, M., & Mester, L. J. (1998). On the profitability and cost of relationship lending. *Journal of Banking & Finance*, 22(6-8), 873-897.
- Bhattacharya, S., & Chiesa, G. (1995). Proprietary information, financial intermediation, and research Incentives. *Journal of Financial Intermediation*, 4(4), 328-357. doi: <http://dx.doi.org/10.1006/jfin.1995.1014>
- Blair, S. (2014). When it comes to the new banking rules, more isn't always better. *Fortune*, 169, 57.
- Boot, A. W. A. (2000). Relationship banking: What do we know? *Journal of Financial Intermediation*, 9(1), 7-25. doi: /10.1006/jfin.2000.0282
- Breitenstein, E. C., & Hinton, N. L. (2017). Community bank mergers since the financial crisis: How acquired community banks compared with their peers. *FDIC Quarterly*, (11)4:41-52. <https://www.fdic.gov/bank/analytical/quarterly/2017-vol11-4/fdic-v11n4-3q2017-article2.pdf>.
- Canoy, M., van Dijk, M., Lemmen, J., de Mooij, R., & Weigand, J. (2001). Competition and stability in banking. The Hague, Netherlands: CBP Netherlands Bureau for Economic Policy Analysis.
- Carbó, S., Humphrey, D., Maudos, J., & Molyneux, P. (2009). Cross-country comparisons of competition and pricing power in European banking. *Journal of International Money and Finance*, 28(1), 115-134.
- Carbo-Valverde, S., Rodriguez-Fernandez, F., & Udell, G. F. (2016). Trade credit, the financial crisis, and SME access to finance. *Journal of Money, Credit and Banking*, 48(1), 113-143.
- Carletti, E., & Hartmann, P. (2003). Competition and stability: What's special about banking? In P. Mizen (Ed.), *Monetary History, Exchange Rates and Financial Markets: Essays in honor of Charles Goodhart* (Vol. 2). Cheltenham, UK: Edward Elgar.
- CHI Research. (2003). *The small business share of GDP, 1998-2004*. (225). Washington D. C.: United States Small Business Administration Retrieved from <http://archive.sba.gov/advo/research/rs225.pdf>.
- Claessens, S., & Laeven, L. (2004). What drives bank competition? Some international evidence. *Journal of Money, Credit & Banking*, 36(3), 563-583. doi: 10.1353/mcb.2004.0044
- Clifton, J. (2015). *American entrepreneurship: Dead of alive?* Washington D.C.: Gallup.
- Cole, R. A., Goldberg, L. G., & White, L. J. (2004). Cookie cutter vs. character: The micro structure of small business lending by large and small banks. *Journal of Financial and Quantitative Analysis*, 39(02), 227-251. doi: doi:10.1017/S0022109000003057
- Cole, R. A., & Wolken, J. D. (1995). *Financial services used by small businesses: evidence from the 1993 national survey of small business finances*. Washington D.C.: Federal Reserve Bank.
- Craig, S. G., & Hardee, P. (2007). The impact of bank consolidation on small business credit availability. *Journal of Banking & Finance*, 31(4), 1237-1263. doi: <http://dx.doi.org/10.1016/j.jbankfin.2006.10.009>
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, Calif.: SAGE Publications.
- Critchfield, T., Davis, T., Davison, L., Gratton, H., Hanc, G., & Samolyk, K. A. (2004). Community banks: Their recent past, current performance, and future prospects. *FDIC Banking Review*, 16(3), 1-56.
- Dahl, D., Fuchs, J., Meyer, A., & Neely, M. (2018) Compliance costs, economies of scale, and compliance performance: Evidence from community banks. St. Louis: Federal Reserve Bank of St. Louis.
- Dennis, W. J. (2011). *Financing small business: Small business and credit access*. Nashville: National Federation of Independent Business.
- Dermine, J. (1999): The economics of bank mergers in the European Union: A review of the public policy issues. working paper 1999/0035, INSEAD, Fointanebleau.

- DeVellis, R. F. (2003). *Scale development : theory and applications*. Thousand Oaks, Calif.: Sage Publications, Inc.
- DeYoung, R. (1998). Comment on Goldberg and White. *Journal of Banking & Finance*, 22(6-8), 868-872.
- DeYoung, R., Glennon, D., Nigro, R., & Spong, K. (2012). Small business lending and social capital: Are rural relationships different? KU Center for Banking Excellence, University of Kansas School of Business, Working Paper 2012-1. https://www.communitybanking.org/~media/files/communitybanking/2013/dgns_2012_sba_lending.pdf.
- DeYoung, R., Gron, A., Toran, G., & Winton, A. (2015). Risk overhang and loan portfolio decisions: Small business loan supply before and during the financial crisis. *Journal of Finance*, 70(6), 2451-2487.
- DeYoung, R., Hunter, W. C., & Udell, G. F. (2004). The past, present, and probable future for community banks. *Journal of Financial Services Research*, 25(2-3), 85-133. doi: 10.1023/b: fina.0000020656.65653.79
- Emmons, W. R. (2021, Dec 9). Slow, steady decline in the number of U.S. banks continues. St. Louis: St. Louis Federal Reserve Bank.
- Elliehausen, G. E., & Wolken, J. D. (1990). *Banking markets and the use of financial services by small and medium-sized businesses*. Washington D.C.: Federal Reserve Bank.
- Elyasiani, E., & Goldberg, L. G. (2004). Relationship lending: A survey of the literature. *Journal of Economics and Business*, 56(4), 315-330. doi: <http://dx.doi.org/10.1016/j.jeconbus.2004.03.003>
- Ergungor, O. (2003). *Community banks as small business lenders: The tough road ahead*. Cleveland: Federal Reserve Bank of Cleveland.
- Estrella, A., Park, S., & Peristiani, S. (2000). Capital ratios as predictors of bank failure. *Economic Policy Review*, 6(2).
- FDIC CBS. (2012). *FDIC Community Banking Study*. Washington D.C.: Federal Deposit Insurance Corporation.
- FDIC CBS. (2020). *FDIC Community Banking Study*. Washington D.C.: Federal Deposit Insurance Corporation.
- Frey, W. H. (2012). *Population Growth in Metro America since 1980*. Washington, DC: The Brookings Institution.
- Gilbert, R. A. & Wheelock, D. C. (2013). Big banks in small places: Are community banks being driven out of rural markets? *Review*, 95(3), 199-218.
- Goldberg, L. G., & White, L. J. (1998). De novo banks and lending to small businesses: An empirical analysis. *Journal of Banking & Finance*, 22(6-8), 851-867. doi: [http://dx.doi.org/10.1016/S0378-4266\(98\)00011-9](http://dx.doi.org/10.1016/S0378-4266(98)00011-9)
- Green, D. (2011). Who is lending to small businesses? The role of community banks. *Communities and Banking*, fall, 15-17.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis (7th ed.)*. Upper Saddle River, N.J.: Prentice Hall.
- Han, J. H. (2017). Does Lending by banks and non-banks differ? Evidence from small business financing. *Banks & Bank Systems*, 12(4), 98-104.
- Harper-Widicus, S. & Jenkins, T. W. (2019) Inside the beltway – Implementing Regulatory Relief, 8: S, 2155. *The National Law Review*. Retrieved from: <https://www.natlawreview.com/article/inside-beltway-implementing-regulatory-relief-s-2155>.
- Hassan, K., & Hippler, W. J. (2015). *National and regional trends in community banking*. New Orleans: University of New Orleans.
- Havlicek, L. L., & Peterson, N. L. (1974). Robustness of the T Test: A guide for researchers on effect of violations of assumptions. *Psychological Reports*, 34(3_suppl), 1095-1114. doi:10.2466/pr0.1974.34.3c.1095.
- Headd, B. (2015). *The role of microbusinesses in the economy*. Washington D.C: Small Business Administration Office of Advocacy.
- Hein, S. E., Koch, T. W., & MacDonald, S. S. (2005). On the uniqueness of community banks. *Economic Review - Federal Reserve Bank of Atlanta*, 90, 15-36.
- Holod, D., & Peek, J. (2013). *The value to banks of small business lending*. (Working Paper No. 13-7). Boston: Federal Reserve Bank of Boston Retrieved from <https://www.bostonfed.org/economic/wp/wp2013/wp1307.pdf>.
- Hoskins, J.D. & Abadi, S. (2022). Growing the community bank in the shadow of national banks: an empirical analysis of the U.S. banking industry, 1994-2018. *Journal of Product & Brand Management*, (in press). doi:10.1108/JPBM-07-2021-3571.
- Hughes, J. P., Jagtiani, J., Mester, L. J., & Moon, C. (2019). Does scale matter in community bank performance? Evidence obtained by applying several new measures of performance. *Journal of Banking & Finance*, 106,471-499.doi:10.1016/j.jbankfin.2019.07.005.
- Jagtiani, J. (2008). Understanding the effects of the merger boom on community banks, *Economic Review - Federal Reserve Bank of Kansas City*, 93(2), 29-48.

- Jagtiani, J., Kotliar, I., Maingi, R. Q. (2016). Community bank mergers and their impact on small business lending, *Journal of Financial Stability*, 27, 106-121. doi: 10.1016/j.jfs.2016.10.005.
- Jagtiani, J., & Lemiex, C. (2016). Small business lending after the financial crisis: A new competitive landscape for community banks. *Economic Perspectives*, 3. Chicago: Federal Reserve Bank of Chicago.
- Jagtiani, J., & Maingi, R. Q. (2018). How important are local community banks to small business lending Evidence from mergers and acquisitions. Federal Reserve Bank of Philadelphia Working Paper 18-18.
- Jaworski, B. J. & Kohli, A. K. (1993). Market orientation: Antecedents and consequences. *Journal of Marketing*, 57(3), 53-70. doi: 10.2307/1251854
- Kobe, K. (2007). *The small business share of GDP, 1998-2004*. (299). Washington D. C.: United States Small Business Administration Retrieved from <http://archive.sba.gov/advo/research/rs299.pdf>.
- Lux, M., & Greene, R. (2015). The state and fate of community banking. M-RCBG Associate Working Paper Series, No. 37. Cambridge, MA: Harvard Kennedy School, Mossavar-Rahmani Center for Business and Government. Retrieved from: http://www.hks.harvard.edu/content/download/74695/1687293/version/1/file/Final_State_and_Fate_Lux_Greene.pdf
- Martinez-Miera, D., & Repullo, R. (2010). Does competition reduce the risk of bank failure?. *The Review of Financial Studies*, 23(10), 3638-3664.
- McKee, G., & Kagan, A. (2018). Community bank structure an x-efficiency approach. *Review of Quantitative Finance and Accounting*, 51(1): 19-41. doi:10.1007/s11156-017-0662-9.
- Meggison, W. L. (2004). Towards a Global Model of Venture Capital. *Journal of Applied Corporate Finance* 16(1), 89-107. doi:10.1111/j.1745-6622.2004.tb00599.x
- Mester, L. J. (2018). Community banking and the Community Reinvestment Act. Cleveland: Federal Reserve Bank of Cleveland. <https://www.clevelandfed.org/newsroom-and-events/speeches/sp-20181003-community-banking-and-the-community-reinvestment-act.aspx>.
- Martin, D. (1977). Early warning of bank failure: A logit regression approach. *Journal of Banking & Finance*, 1(3), 249-276.
- Meyer, P. A., & Pifer, H. W. (1970). Prediction of bank failures. *The Journal of Finance*, 25(4), 853-868.
- Minton, B. A., Taboada, A. G., & Williamson, R. (2019). Bank mergers and small business lending: Implications for community investment. NBER Working Papers 29284, National Bureau of Economic Research. doi:10.3386/w29284
- Nguyen, J., Parsons, R., & Argyle, B. (2021). An examination of diversification on bank profitability and insolvency risk in 28 financially liberalized markets. *Journal of Behavioral and Experimental Finance*, 29, 1004-1016. doi:10.1016/j.jbef.2020.100416
- O'Cass, A., & Ngo, L. V. (2007). Balancing external adaptation and internal effectiveness: Achieving better brand performance. *Journal of Business Research*, 60(1), 11-20. doi:10.1016/j.jbusres.2006.08.003.
- Pecotich, A., Hattie, J., & Low, L. (1999). Development of Industuct: A scale for the measurement of perceptions of industry structure. *Marketing Letters*, 10(4), 403-416. doi: 10.1023/a:100817462320.
- Peek, J., & Rosengren, E. S. (1998). Bank consolidation and small business lending: It's not just bank size that matters. *Journal of Banking & Finance*, 22(6-8), 799-819. doi: 10.1016/s0378-4266(98)00012-0
- Peirce, H., Robinson, I., & Stratmann, T. (2014). *How are small banks faring under Dodd-Frank*. Working Paper No. 14-05. Fairfax, VA: Mercatus Center, George Mason University. Retrieved from: https://www.mercatus.org/system/files/Peirce_SmallBankSurvey_v1.pdf
- Petersen, M. A., & Rajan, R. G. (1994). The benefits of lending relationships: Evidence from small business data. *The Journal of Finance*, 49(1), 3-37. doi: 10.1111/j.1540-6261.1994.tb04418.x
- Porter, M. E. (1980). *Competitive strategy : techniques for analyzing industries and competitors*. New York: Free Press.
- Putnam, K. J., & Hassan, M. K. (2017). US Community Bank Failure: An Empirical Investigation. *Banking & Finance Review*, 9(2), 35-67.
- Rajan, R. G. (2012). Presidential address: The corporation in finance. *Journal of Finance*, 67(4), 1173-1217. doi: 10.1111/j.1540-6261.2012.01745.x
- Rajan, R., & Winton, A. (1995). Covenants and collateral as incentives to monitor. *The Journal of Finance*, 50(4), 1113-1146. doi: 10.1111/j.1540-6261.1995.tb04052.x
- Ramaswamy, K. (1997). The performance impact of strategic similarity in horizontal mergers: Evidence from the U.S. banking industry. *Academy of Management Journal*, 40(3), 697-715. doi: 10.2307/257059

- Rhoades, S. A. (1993): The efficiency effects of horizontal bank mergers, *Journal of Banking and Finance*, 17, 411-22.
- Rhoades, S.A. (1998): The efficiency effects of Bank Mergers: An overview of case studies of nine mergers, *Journal of Banking and Finance*, 22, 273-91.
- Robb, A. M., Reedy, E. J., Ballou, J., DesRoches, D., Potter, F., & Shao, Z. (2010). *An overview of the Kauffman Firm Survey: Results from the 2004–2008 data*. Kansas City: Kauffman Foundation.
- Rutledge, J. (2014 Oct 5). Small bank business loans and the jobless recovery. *Seeking Alpha*. Retrieved from <http://seekingalpha.com/article/2540805-small-bank-business-loans-and-the-jobless-recovery>
- Sargent, W., Haynes, G. & Williams, V. (2011). Small business lending in the United States 2009-2010. Washington D.C.: U.S. Small Business Administration. http://www.sba.gov/sites/default/files/files/sbl_10study.pdf.
- SBA (2019, Apr 24). Small Businesses Drive Job Growth In United States; They Account For 1.8 Million Net New Jobs, Latest Data Show. (Press Release) Washington D.C.: Small Business Administration, Office of Advocacy. Retrieved from <https://advocacy.sba.gov/2019/04/24/small-businesses-drive-job-growth-in-united-states-they-account-for-1-8-million-net-new-jobs-latest-data-show/>
- Shane, S. (2008). *The illusions of entrepreneurship : the costly myths that entrepreneurs, investors, and policy makers live by*. New Haven: Yale University Press.
- Talbot, S., Mac an Bhaird, C., & Whittam, G. (2015). Can credit unions bridge the gap in lending to SMEs? *Venture Capital*, 113-128. doi:10.1080/13691066.2015.1021027
- Valverde, S. C. & Humphrey, D. B. (2004). Predicted and actual costs from individual bank mergers. *Journal of Economics and Business*, 56 (2), 137-157.
- Weerawardena, J. (2002). The role of marketing capability in innovation-based competitive strategy. *Journal of Strategic Marketing*, 11(1), 15-35. doi:10.1080/0965254032000096766.
- Wiens, J., & Jackson, C. (2014 Sept 9). The importance of young firms for economic growth. *Kauffman Foundation*. Retrieved from <http://www.kauffman.org/what-we-do/resources/entrepreneurship-policy-digest/the-importance-of-young-firms-for-economic-growth>
- Zabala, A. C., & Josse, M. J. (2014). Shadow credit and the private, middle market: Pre-crisis and post-crisis developments, data trends and two examples of private, non-bank lending. *The Journal of Risk Finance*, 15(3), 214-233.

APPENDIX A

Although presented here by group, the online survey presented the items to respondents in a randomly assigned arrangement. The response for each item was entered by manipulating a sliding pointer outputting an integer value within a range of 0 to 100.

Competitive Intensity

- CI1. Competition in our service area is cutthroat.
Disagree-----Neither Agree nor Disagree-----Agree
- CI2. There are many “promotion wars” in our service area
Disagree-----Neither Agree nor Disagree-----Agree
- CI3. Competition on fees is intense in our service area
Disagree-----Neither Agree nor Disagree-----Agree
- CI4. Competition on loan interest rates is intense in our service area
Disagree-----Neither Agree nor Disagree-----Agree
- CI5. Competition on deposit interest rates is intense in our service area
Disagree-----Neither Agree nor Disagree-----Agree
- CI6. Appropriate terms to describe competition in our service area are “intense” and “fierce”
Disagree-----Neither Agree nor Disagree-----Agree

Marketing Capabilities

- MC1. Relative to competitors in our service area, the effectiveness of our promotional activities (e.g. advertising) in gaining market share is:
Less Effective-----About the Same-----More effective

- MC2. Compared to competitors in our service area, the quality of our marketing resources is:
 Much Lower-----About the Same-----Much Higher
- MC3. Compared to competitors in our service area, our advertising expenditure is:
 Much Lower-----About the Same-----Much Higher
- MC4. To what extent does your bank's marketing capabilities enable it to successfully compete with other banks in your service area?
 Not at All-----Moderately-----A Great Deal
- MC6. To what extent does your bank's marketing message reaches potential new clients effectively?
 Not Very Effective-----Moderately Effective-----Very Effective

Cherry Picking

- CP1. We are constantly at risk of large nationwide and regional banks poaching our most credit worthy commercial borrowers
 Disagree-----Neither Agree nor Disagree-----Agree
- CP2. We are constantly at risk of large nationwide and regional banks poaching our large depositors
 Disagree-----Neither Agree nor Disagree-----Agree
- CP3. Our most creditworthy borrowers bring offers from competing banks to negotiate lower loan rates.
 Disagree-----Neither Agree nor Disagree-----Agree
- CP4. Our largest depositors bring offers from competing banks to negotiate higher deposit rates.
 Disagree-----Neither Agree nor Disagree-----Agree

Small Business Lending

- SB1. As a result of large nationwide and regional banks pursuing the most credit worthy commercial accounts community banks often have to deny loans to small startup businesses to manage the overall loan portfolio risk.
 Disagree-----Neither Agree nor Disagree-----Agree
- SB2. Fierce competition for the most creditworthy commercial borrowers results in less credit being extended to the smallest businesses.
 Disagree-----Neither Agree nor Disagree-----Agree
- SB3. Post-crisis regulatory oversight makes lending to less financially transparent small businesses difficult.
 Disagree-----Neither Agree nor Disagree-----Agree
- SB4. Regulatory compliance makes underwriting loans to very small business (e.g., under 100k) too costly.
 Disagree-----Neither Agree nor Disagree-----Agree

New Bank Startup

- NB1. When interest rates return to historic norms it would be profitable to start a new bank in our service area.
 Disagree-----Neither Agree nor Disagree-----Agree
- NB2. The regulatory hurdles of starting a new bank make the startup cost too high to overcome even when interest rates return to historic norms.
 Disagree-----Neither Agree nor Disagree-----Agree
- NB3. It would be possible for a new bank in our market to attract sufficient clients away from existing banks
 Disagree-----Neither Agree nor Disagree-----Agree
- NB4. The competitive intensity in our market is such that a small new bank could not survive
 Disagree-----Neither Agree nor Disagree-----Agree
- NB5. Unmet consumer needs in our service area are significant enough to make a new bank startup successful
 Disagree-----Neither Agree nor Disagree-----Agree