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Community Banks as Small Business Lenders: The Tough Road Ahead

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This paper investigates the performance of community banks as small business (relationship) lenders. Theory suggests that competition reduces the benefits of bank-borrower relationships, making small business loans more risky and less profitable. In support of this theory, the evidence indicates that community banks' performance deteriorates with increasing small business lending. Policies that encourage community banks to engage in more aggressive small business lending may lessen the soudness of these institutions.

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1 Introduction

Commercial banks are, by far, the most important supplier of credit to small businesses. According to Bitler et al. (2001), 39 percent of small businesses responding to the 1998 Survey of Small Business Finances had a loan, a credit line or a capital lease from a commercial bank. The second largest supplier, the finance companies, was used by only 13 percent of the respondents.

Community banks with less than $1 billion in assets are heavily committed to small business lending. As of June 30, 2000, community banks held, on average, 17 percent of their total assets in small business loans, while larger banks held only about 5 percent. What makes small business lending so attractive to community banks?[1] Community banks devote substantial resources to establishing close relationships with borrowers (Cole et al., 1999) and consequently, gain valuable nonpublic information (Stein, 2002; Berger et al., 2002). This, the theory goes, reduces the banks' cost of making loans, increases credit availability (Petersen and Rajan, 1994; Berger and Udell, 1995, 1996), helps them lock-in their customers, and partially shields them from competition (Rajan, 1992; Nakamura, 1994).

On the surface, policies that encourage community banks to become even more active in the small business lending market seem to be the right way to go. These

[1] A bank's lending to a single borrower cannot exceed 10 percent of its capital. So, the very small banks (<$100 M in assets) usually have no choice but make small business loans.

policies will make it easier for small businesses to get the financing they need while pushing community banks into a potentially risky but, at least in theory, profitable market. In other words, as long as banks are compensated for the risk they are undertaking, the decline in their asset quality (small businesses have a very high default rate) may be a risk policy makers are willing to take for the ultimate goal of supporting small businesses.[2] This policy goal may be achieved by either forcing the banks to lend to small businesses or by giving them the economic incentives to be more small-business friendly. For example, until 1996 only real estate loans qualified for meeting the Community Reinvestment Act's (CRA) lending requirements. In 1996, small business loans were also allowed to be a part of the mix. This policy change coincided with a significant jump in the number of small business loans (See Figure 1).[3]

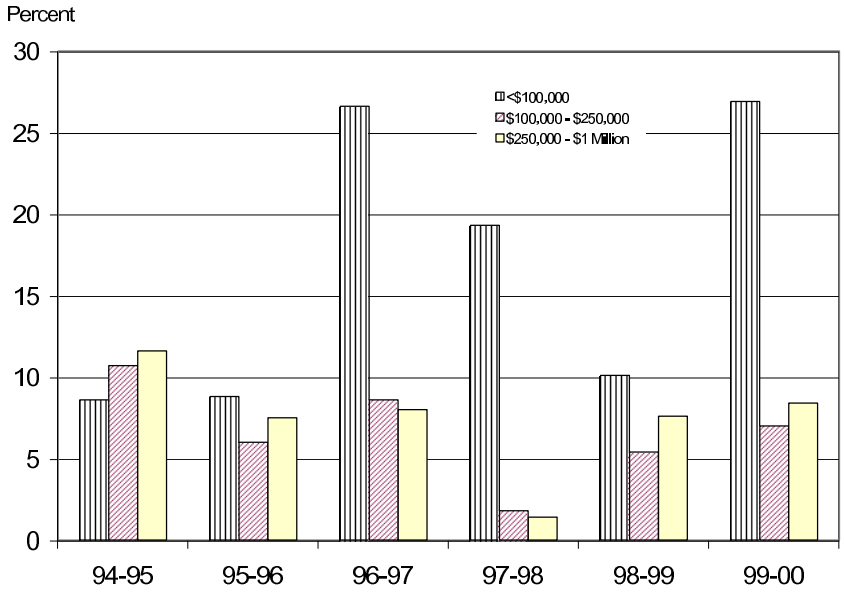
The question is, are the earnings gains from higher small business lending enough to justify the declining asset quality?

This is the issue I address in this paper. The evidence I will present suggests a

[2]Small businesses make an indispensable contribution to the U.S. economy by employing about 52 percent of the private work force, creating 75 percent of the new jobs, contributing 51 percent of private sector output and producing 55 percent of innovations (see the "Small Business Lending in the United States" report prepared by the Office of Advocacy of the U.S. Small Business Administration, June 2000).

[3]I do not have any data that establish a causation between CRA and the jump in small business lending. Yet, the increase in small business loans in that period is noteworthy. I will present a more detailed discussion on how other policies may encourage small business lending later in the paper.

Figure 1: **Year-to-Year Growth of Small Business Loans**



Source: U.S. Small Business Administration

negative answer. I find that small business lending hurts banks' asset quality as well as their earnings and capital. On average, community banks appear to be losing their traditional advantages and encouraging them to expand further in this area is likely to cause more damage.

Community banks' troubles are mainly caused by the changes in the banking industry as a result of the technological developments and deregulation. In today's credit market, community banks are facing tough competition from large banks on many fronts. According to the American Bankers Association's sixth annual community bank competitiveness survey, 37 percent of the 900 respondents in 50 states said large banks were their chief competitors for small business loans. Large banks have the potential to generate large volumes of small business loans at a lower cost than small banks by using automated credit-scoring techniques. Doing so successfully enables large banks to pick off the better credit risks and reduce the profitability of the community banks' best loans (Whalen, 2001).

Recent research suggests that the nature of bank-borrower relationships may be changing as a result of interbank competition (see Boot and Thakor, 2000). In an increasingly competitive market where lending rents are declining, it is becoming more difficult for banks to divert resources to the development and sustenance of costly bank-borrower relationships. The deteriorating relationship rents, however, are not enough to deter banks from engaging in more aggressive small business (relationship)

lending. After all, what is their only alternative if they do not make relationship loans? Transactions loans, which are short-term borrowings that companies take out to finance day-to-day transactions, purchase current assets, or repay current liabilities, depend very little on the bank's earlier experience with the borrower and therefore, can be replicated easily by any bank. Because rents from transaction loans shrink faster than the rents from relationship loans in a competitive environment, banks make more relationship loans but reduce the quality of the relationship services they provide to their borrowers. For example, banks may no longer be willing to spend the time it takes to fully understand the specific needs of a particular business or learn about the way it manages its operations or finances. Because banks are the major supplier of small business credit, small businesses may suffer from the deteriorating relationships because the credit they receive may be mispriced or they may receive no investment guidance. Any of these factors could weaken a business's financial situation and increase the likelihood of default, which would, in turn, weaken the banks' earnings performance *and* asset quality.

The main contribution of this paper is that although my findings support the earlier results that relationship loans are profitable, I show that the profitability of small business loans does not necessarily justify the risks a community bank must assume by making them. I also find that the effects of small business lending on the performance of large banks are statistically insignificant. Community banks' poor performance in their traditional area of expertise suggests that their numbers will continue to dwindle.

The rest of the paper is organized as follows. In Section 2, I discuss the theory and evidence to date which point to a danger in increased lending to small businesses by community banks. Section 3 presents the data I use to test whether small-business lending is hurting community banks. The empirical results are in Section 4. Section 5 discusses the policy implications of the analysis. Section 6 concludes.

2 Small Businesses and the New Financial Services Industry

Lending to small businesses entails an information-intensive credit evaluation process. Little information is publicly available on the finances of small businesses because they are not traded in the stock market, financial analysts do not track their performance, and their financial statements and contracts (labor, customer and so on) are kept private. The lack of public information erects a barrier between small businesses and investors, which thwarts these small institutions from accessing capital markets but creates a raison d'être for banks (Greenbaum et al., 1989; Sharpe, 1990; Rajan, 1992; Stein, 2002).[4]

Banks acquire information about small businesses by devoting substantial resources to getting to know their customers and developing relationships with them. The relationship may take many forms. For example, a bank may provide services such as screening loan applicants whose quality is not transparent to capital markets (see, for

[4]Venture capital is not within the scope of this paper.

example, Boot et al., 1987; Kanatas, 1987; Thakor and Udell, 1987; Berkovitch and Greenbaum, 1990, where the borrower's choice of banking contract reveals its type), or monitoring investments (e.g. Diamond, 1991).

All these services involve borrower-specific information available to only the bank and the borrower. What is the value of this information? The evidence suggests that when a bank knows more about a firm than other banks, it can charge a little extra for its services without fearing the loss of that customer (Berger and Udell, 1996; Carter et al., 2002). So banks lend to small businesses despite the cost of getting to know them because they hope to recover their initial losses from profitable future business. But how strong is this shield in practice? With increasing access to capital markets and nonbanks eating away banks' turf, how will competition change the nature of bank lending?

Petersen and Rajan (1995) argue that greater competition reduces banks' profits and decreases costly relationship lending. After all, banks are not willing to incur the initial losses that come with new relationships if they do not expect to profit from them. However, what alternative source of income does a bank have in the absence of relationship lending? In addition, how does competition affect that alternative?

In a recent study, Boot and Thakor (2000) address these questions. Banks, they argue, engage in both relationship and arm's-length (transaction) lending. Transaction loans are general purpose, short-term borrowings that companies take out to finance

day-to-day transactions, purchase current assets, or repay current liabilities. Unlike relationship loans – which are tailored to the needs of a particular borrower based on a bank's previous experience with that customer– transaction loans can be replicated by any bank. A borrower, for example, who has to pay back trade credit today but will not receive money from his receivables for a few more days may request a short-term loan from the bank. Any bank can make such a simple, short-term loan because it does not necessitate gathering of detailed information about the borrower, such as relationships with suppliers or upcoming labor contracts.

Boot and Thakor suggest that the ability to tailor products to an established borrower's particular needs is the way relationship loans provide better protection from competition. They find that competition reduces bank's profits from both relationship and arm's-length lending. However, the effect is uneven across the two alternatives. As expected, an increase in competition reduces a bank's profits from transaction lending more than its profits from relationship lending. Thus, competition encourages banks to shift from transaction to relationship lending. The findings of Berger et al. (2001) appear to support this argument. They observe higher small business (relationship) lending by small banks when competition increases in their market due to M&A activity or new entry.

However, the nature of relationship lending itself changes with increasing competition. It becomes more important, but each loan has less added value for the borrower.

In other words, as the pie (the bank's already-strained resources) is divided among a larger group of relationship-borrowers, the bank will serve less pie to each customer.

Boot and Thakor's analysis has serious implications for the future financial performance of community banks. The financial performance of banks depends on the financial performance of businesses they extend credit to. Because small businesses rely on relationship-based services, their performance is likely to deteriorate when competition forces banks to reduce the overall quality of these services. This, in turn, weakens the banks' earnings performance and asset quality.

To make matters worse for community banks, large banks use centralized, automated credit scoring to generate large volumes of small business loans at a lower cost than small banks (see Akhavein et al., 2001; Levonian, 1997). The credit scoring process is not an information-intensive credit evaluation technique, but borrowers whose credit histories receive a passing grade may find it cheaper to obtain credit from a large bank.[5] Thus, while the competition is forcing small banks to reduce the resources they spend on each customer, the fraction of businesses that need those resources goes up in their borrower pool, as the larger banks pick off the better credit risks and reduce the

[5]In fact, funding concerns no longer seem to be among the greatest worries of small businesses. According to Bitler et al. (2001), less than 7 percent of small businesses surveyed in the 1998 Survey of Small Business Finances viewed lack of financing as their most important problem. Their greatest worry -according to 12 percent of those surveyed- was competition from larger, international or internet companies.

profitability of the community banks' best loans. This may cause community banks to replace the loans large banks take away from them with less profitable/riskier credits. Clearly, this will further diminish the earnings, and asset quality of the community banks.

Loan pricing is not the only area where community banks are pressured by larger banks. One resource in short supply in the commercial lending market today is commercial loan officers.[6] Banks cut their loan-officer-training programs over the past decade to reduce costs. This made economic sense at the time because the use of credit scoring models had reduced large banks' dependence on loan officers, and small businesses did not care much about their relationships with a loan officer during the good times. According to the 1999 National Small Business Survey conducted by PSI Global, only 10 percent of small businesses said their relationship with a loan officer was the primary reason for choosing a lender. With the slowing economy, however, that same fraction almost doubled to 19 percent a year later, while the market for commercial loan officers was the tightest in 14 years. The problem is especially distressing for community banks, which cannot afford the signing bonuses and other benefits offered by large banks to experienced, high-quality loan officers who are fundamental for profitable relationships (Myers, 2001).

Thus, without the necessary resources, our discussion raises the possibility that community banks will be negatively affected by policies that give them an incentive

[6] American Banker, February 26, 2001, "Wanted: A Few Good Commercial Loan Officers"

to further expand in the small business lending area. In order to test these arguments empirically, I summarize the testable predictions below.

2.1 Testable Predictions

Small businesses have a high default rate. Even when relationships are beneficial to both lenders and borrowers, the asset quality of a bank may deteriorate as a result of increasing small business lending. Increasing risk is not necessarily a bad thing as long as the bank is compensated for the higher default risk by higher earnings. In other words, if relationships are profitable, then aggressive small business lending is consistent with a high-risk/high-return strategy. However, if relationships are not profitable, both asset quality *and* earnings will get hit by increasing small business lending. This is the argument Prediction 1 is based on.

Prediction 1 *Asset quality will deteriorate with increasing small business lending without compensatory higher earnings.*

Capital protects a bank against unexpected losses. A bank that takes on greater risk is expected to hold higher capital. The main source of Tier 1 capital for community banks is earnings. Because additional small business lending is expected to increase the bank's risk without compensating earnings, it should hurt the bank's capital adequacy as measured by the Tier 1 capital. This is the claim in Prediction 2.

Prediction 2 *Capital adequacy will deteriorate with increasing small business lending.*

3 Data and Method

I test the predictions above by using the following accounting measures of asset risk, earnings and capital.

The measure of risk is *ProblemLoan*, which is the sum of net charge-offs, more than 30-day past due loans and nonaccrual loans as a percentage of total assets. This variable measures the amount of money the bank has lost or put at a significantly higher risk of being lost (compared to regularly paid, current loans) as a result of its loan portfolio choice.

The measure of earnings is the standard return on assets (*Roa*) and risk-adjusted return on assets (*AdjRoa*) defined as

$$AdjRoa = \frac{Net\ Income - ProblemLoan + Loan\ Loss\ Provision}{Total\ Assets}$$

In other words, the income is adjusted for the principal that was lost or put at a significantly higher risk of a loss -compared to a current loan- while creating it. Because the loan loss provision is already subtracted from income but is also included in *ProblemLoan* as a fraction of nonaccrual loans, I add it back to prevent double counting.

Finally, *Tier 1* is the bank's Tier 1 risk-based capital ratio as defined by the Federal Reserve capital guidelines (Tier 1 capital divided by risk-weighted assets). Note that *AdjRoa* and *Tier 1* are actually two different ways of measuring the adequacy of income

given the risk.

In addition to the accounting measures, I also use the Federal Reserve bank examiner ratings. Bank examiners use a system known as CAMELS to rate banks' operations and performance during annual bank exams. The CAMELS rating evaluates banks in six areas, each of which is denoted by a letter in the CAMELS acronym: capital adequacy (C); asset quality (A); management and administration (M); earnings (E); liquidity (L); and sensitivity to market (interest rate) risk (S). Each area is rated on a scale of 1 (best) to 5 (worst), and the composite rating is usually the arithmetic average of the individual ratings. Because managerial and market risk issues are not relevant to this study and the composite rating is usually not more informative than its components, I do not include those variables in the analysis. The other ratings are based primarily on the following considerations:

- The *asset quality* rating deals with the bank's credit risk. In addition to an account-by-account review of the bank's loan and securities portfolios, the examiner determines whether the bank has put in place the policies and tools necessary to measure the credit risk inherent in its asset mix.

- The *earnings* rating is based on the level and the trend of the bank's return on average assets (ROAA), as well as the quality of the individual components of income. Greenawalt and Sinkey (1988) show that bank managers smooth income by increasing provisions for loan losses when the earnings are high and

under-providing for losses when earnings are low. If a bank is using the loan-loss provision to hide weak earnings, its rating may be downgraded. Because the trend of the ROAA is also taken into account, the E rating somewhat incorporates the effects of the riskiness of the assets on earnings. However, there is no explicit adjustment for risk.

- The *capital adequacy* rating measures whether the bank has enough equity to protect itself against unexpected losses given the level of earnings, the liquidity of its assets, and its credit and interest rate risk exposure.

As a result of meticulous analysis by bank examiners, these ratings are less prone to window dressing and contain more information than what is already reflected in accounting ratios (see Berger and Davies, 1998).

I analyze the effect of small business lending on bank performance in years 1996 and 2000. The reason I start the analysis in 1996 is that starting from earlier years significantly reduces the number of banks that were operational in the entire period and increases the likelihood of sample selection bias when I study the effect of the changes in a bank's loan portfolio on the change in its rating and accounting ratios (more on this later). Starting from later years reduces the probability of observing a change in the CAMELS ratings. Finally, 2000 is the latest fourth quarter data available.

Community banks are usually defined as banks with total assets less than $1 billion, although alternative definitions are available. Title VI of the Gramm-Leach-Bliley Act

of 1999, for example, sets the cutoff at $500 million. The results of the paper are not affected by these limits. So, I abide by the $1 billion definition but carve out a "small community bank" category which consists of banks with total assets less than $150 million. These are the banks that are obligated to make small business loans because they cannot devote more than 10 percent of their capital to any single borrower. Finer partitions do not affect the results. Banks with total assets between $150 million and $1 billion will be referred to as "large community banks".

Individual bank balance sheet and income statement data, including the composition of each bank's loan portfolio, are obtained from the December Bank Call Reports, with the exception of small-business-lending data, which are reported only in June Call Reports. Other bank-specific data, such as charter type, geographic location, age, Federal Reserve or FHLB membership status, and Bank Holding Company affiliation information come from the Federal Reserve Bank Structure and Relationships Tables.

December 2000 Call Reports contain data from 8,404 commercial banks and December 1996 Call Reports contain 9,591 banks. Table I shows the number of banks deleted from the sample for various reasons. Large banks with total assets greater than $1 billion are deleted for two reasons. First, in 2000, these banks had, on average, less than 5 percent of their assets invested in small business loans and I do not find a statistically significant relationship between small business lending and large bank performance. So, for the sake of brevity, the results for large institutions are not presented

here.[7]

Banks that do not make small business loans are also deleted from the sample. These banks may have a different focus, such as consumer and real estate lending, which may explain their lack of interest in small business lending. Deleting them prevents us from comparing apples and oranges. Let me note though that adding those banks back into the sample improves the significance of my results. After discarding banks with missing values, the year-2000 sample has 3,990 banks for CAMELS analysis and 4,865 banks for accounting ratio analysis. The 1996 sample has 4,158 banks for CAMELS and 4,874 banks for accounting ratio analysis.

The data set that I use to analyze the changes in performance in the 1996-2000 period consists only of those banks that stayed in business during that entire period (6,716 banks). Large banks with total assets greater than $1 billion are again deleted. Also deleted are banks that made no small business loans in 1996 or in 2000 (2,000 banks). After discarding banks with missing values, there are 3,076 institutions in the CAMELS sample and 4,508 banks in the accounting ratio sample.

3.1 Method

The analysis is based on a specification that explains the effect of small business lending on the ratings and accounting measures mentioned above, controlling for bank- and market-specific factors ($\boldsymbol{x}$).

[7] Available upon request.

CAMELS ratings are analyzed with an ordered logit model. The best rating, "1", is assigned the highest order (1). The worst rating, "5", is assigned the lowest order (5). Table II shows the number of banks in each order for each rating. Let $R \in \{\text{A, E, C}\}$ represent a particular CAMELS rating. The logit model is of the form:

$$g(\Pr(R < i+1|\boldsymbol{x_1})) = \alpha_i + \boldsymbol{\beta_1'}\boldsymbol{x_1} + \epsilon \qquad 1 \leq i \leq 4 \tag{1}$$

where $g(p) = \log\left(\frac{p}{1-p}\right)$. $\alpha_1, \ldots, \alpha_4$ are the four intercept parameters and $\boldsymbol{\beta_1}$ is the vector of parameter estimates. By construction, a positive parameter estimate indicates that an increase in the explanatory variable increases the chance that a particular bank has a high CAMELS rating (remember that 1 is a higher rating than 5).

The set, $\boldsymbol{x_1}$, consists of 23 explanatory variables. *SmallBus* is the share of small business loans in the bank's total assets. *Asset* is the log of the bank's total assets. *Leverage* is the ratio of the bank's interest-bearing liabilities to total assets and controls for the capital structure effects. *Focus*, which is defined as

$$\textit{Focus} = \frac{1}{\text{Total loans and leases}} \text{x} \quad \max\Big\{ \begin{array}{l} \text{Loans secured by real estate, Loans to depository institutions,} \\ \text{Loans to farmers, Commercial and Industrial loans, Acceptances of other} \\ \text{banks, Consumer loans, Loans to foreign governments, Loans to states} \\ \text{and their subdivisions, Other loans, Leases} \Big\} \end{array}$$

captures the level of diversification of the bank's loan portfolio by measuring the size of the largest group of loans in the portfolio. In other words, a bank that specializes

in a particular type of loan has a larger *Focus* variable than a diversified bank. The reason this variable is included in the analysis is that the level of *SmallBus* may be capturing the bank's degree of corporate diversification. We have vast evidence from the corporate finance literature that operating in multiple lines of business may destroy value because managers' expertise is specific to a particular product (Fershtman and Kalai, 1993), it becomes more difficult to give managers the appropriate incentives (Rotemberg and Saloner, 1994), diversified firms stick with money-losing projects longer than the marketplace would, and they overinvest compared to stand-alone firms (Berger and Ofek, 1995). The *Focus* variable controls for this corporate diversification effect, which may be included in *SmallBus*.

I use four variables in order to capture the level of competition in a bank's market: *LogPop*, ΔPop, *LogPop* x ΔPop, and *MedAsset*. *LogPop* and ΔPop are the log population and population growth, respectively, of the Metropolitan Statistical Area (MSA) where a bank's headquarters are located. If the bank is located in a rural area, I use the population of the county. The data source is the U.S. Census Bureau. The underlying assumption behind the choice of these three variables is that banks in densely populated, fast-growing areas face tougher competition than banks in sparsely populated areas. *LogPop* x ΔPop captures the joint effect of large population and fast growth. It is a measure of the economic activity in the bank's market. Another common measure of competition in the banking market is the Herfindahl index, which measures the deposit market concentration. The problem with the Herfindahl index is

that it does not account for the level of "nonbank" competition in the deposit market (e.g., mutual funds, insurers, and pension funds). Banks' share of deposit dollars has been slowly declining since the early 1990s. In 1990, banks controlled more than 50 percent of deposit dollars; in 1995 they controlled less than 30 percent.[8] Also, because of industry deregulation, deposit market concentration provides little information about the lending market competition. For example, there are six banks headquartered in the District of Columbia but the U.S. Small Business Administration finds 27 banks lending to small firms in the district. The advantages of using population and population growth as a measure of competition are threefold. First, population is a strong determinant of market entry and hence competition (Amel and Liang, 1997). Second, population is negatively correlated with the Herfindahl index (Berger and Hannan, 1998). In other words, deposit market tends to be less concentrated in heavily populated areas. Finally, obtaining the population figure is much easier than calculating the Herfindahl index. The fourth variable, *MedAsset*, is the log of the median assets across all banks in the bank's market. It captures the effect of the size structure of the banking market.

I include loans-to-deposit ratio, *LoantoDep*, to measure the extent of the bank's lending activity, which is a function of loan demand and management's risk appetite. Also, to control for the effect of local economic conditions, I use the MSA or county

[8]Source: "Deloitte sees dogfight with nonbanks over deposits heating up", American Banker, February 2 1998, p.4

unemployment rate *Unemployment*.

The variable *Branches* measures the extensiveness of a bank's branch network. It is defined as the number of branches per million dollars of assets.

Bhc is a dummy variable that controls for the effects of Bank Holding Company (BHC) affiliation. We know from earlier research that BHC affiliation affects the bank's capitalization (Acharya, 1991) and reduces probability of failure and profit efficiency of de novo banks (DeYoung and Hasan, 1998; DeYoung et al., 2000). To capture these effects, the dummy variable is set to 1 if the bank is a subsidiary of a BHC and to zero otherwise. Also, to distinguish between shell BHCs that have one subsidiary bank and large BHCs with bank and nonbank subsidiaries, I define a variable, *BhcAsset*, that measures the difference between the consolidated log assets of the top-holder BHC and the log assets of the subsidiary bank. *BhcAsset* equals zero for a bank that is not affiliated with a BHC or if the BHC does not hold a controlling share.

Other bank-specific explanatory variables in $\boldsymbol{x_1}$ include:

- *Age*: The log of 1 plus the bank's age.
- *Msa*: Dummy variable that equals 1 if the bank is located in an MSA and zero otherwise.
- *Charter*: Dummy variable that equals 1 if the bank has a federal charter and zero otherwise.

- *Fhlb*: Dummy variable that equals 1 if the bank is a member of the FHLB system and zero otherwise.

- *Frs*: Dummy variable that equals 1 if the bank is a member of the Federal Reserve system and zero otherwise.

- *BIF*: Dummy variable that equals 1 if the bank is insured by FDIC-BIF and zero otherwise.

- *SAIF*: Dummy variable that equals 1 if the bank is insured by FDIC-SAIF and zero otherwise.

- *Acquired*: Dummy variable that equals 1 if the bank's ownership and control have changed hands during a particular year and zero otherwise.

- *Divested*: Dummy variable that equals 1 if the bank's owner has relinquished its control during a particular year and there is no mention of a new controlling owner.

- *Terminated*: Dummy variable that equals 1 if the bank's owner liquidates or merges with the bank during a particular year.

The effects of a change in a bank's small business lending portfolio over time on that bank's ratings are analyzed with a similar model. Let $\Delta R = R_{2000} - R_{1996}$. Note that a negative ΔR means that the rating has improved. The highest improvement,

"-4", is assigned the highest order (1). The largest decline, "4", is assigned the lowest order (9). The model is again of the form:

$$g(\Pr(\Delta R < i - 4 | \boldsymbol{x_1},\ \boldsymbol{x_2})) = \alpha_i + \boldsymbol{\beta_1'} \boldsymbol{x_1} + \boldsymbol{\beta_2'} \boldsymbol{x_2} + \epsilon \qquad 1 \leq i \leq 8 \tag{2}$$

The set of explanatory variables that I use in the analysis of rating changes in the 1996-2000 period consists of the variables in $\boldsymbol{x_1}$ set at their values in 1996 and also of new variables, $\boldsymbol{x_2}$, that measure the changes in $\boldsymbol{x_1}$ from 1996 to 2000. In particular, $\Delta SmallBus$ is the difference between *SmallBus*-2000 and *SmallBus*-1996, with a positive sign indicating an increase in small business lending. Other variables are similarly defined and include: $\Delta Asset$, $\Delta MedAsset$, $\Delta Focus$, $\Delta Leverage$, $\Delta LoantoDep$, $\Delta Branches$, $\Delta Unemployment$ and $\Delta BhcAsset$. Also in $\boldsymbol{x_2}$, *Acquired*, *Divested* and *Terminated* cover the entire 1996-2000 period rather than just a particular year. Finally, *Rating1996* is the year-1996 level of the rating under consideration.

The analysis of the accounting ratios is a bit more complicated. I proceed in two steps. First, I show that both earnings and risk increase as a result of small business lending. Second, I show that the increase in earnings is not enough to compensate for the higher risk. In the first step, I estimate the following model using two-stage least squares.

$$ProblemLoan = Intercept + \boldsymbol{\beta_1'} \boldsymbol{x_1} + \epsilon_1 \tag{3}$$

$$Roa = Intercept + ProblemLoan + \boldsymbol{\beta_3'} \boldsymbol{x_3} + \epsilon_2 \tag{4}$$

Note that one problem with jointly estimating risk and return is that both the risk and return may depend on the same market and bank-specific factors, $\boldsymbol{x_1}$. So we have to delete some variables from $\boldsymbol{x_1}$ in order to obtain $\boldsymbol{x_3}$. In order to determine which variables to delete, I estimate (4) using a stepwise OLS, which keeps a variable in the model if its statistical significance is better than 15 percent. In the 1996 sample, *MedAsset, Msa, Charter* and *SAIF* are deleted. In the 2000 sample, *Unemployment* is deleted in addition to those four variables. Note that *ProblemLoan* and *SmallBus* are forced into the model even if stepwise OLS finds that they are statistically insignificant.

In the second step, I estimate the following model using OLS.

$$Y = Intercept + \boldsymbol{\beta_1'} \boldsymbol{x_1} + \epsilon \tag{5}$$

where $Y \in \{AdjRoa,\ Tier\,1\}$.

As in (2), I analyze the change in these variables from 1996 to 2000 using the following OLS model.

$$\Delta Y = Intercept + \boldsymbol{\beta_1'} \boldsymbol{x_1} + \boldsymbol{\beta_2'} \boldsymbol{x_2} + \epsilon \tag{6}$$

Note that in this case, $\boldsymbol{x_2}$ includes either *Tier1-1996* or *AdjRoa1996* as the level of the ratio in 1996.

4 Analysis

In this section, I first present some descriptive statistics. Then, I present the results of the analysis. For the sake of brevity, the tables contain the results for only a selected number of explanatory variables although all of them were included in the analysis.

4.1 Summary Statistics

Summary statistics for all the variables are presented in Table III. As of June 30, 2000, small business loans constitute, on average, 22 percent of small community banks' total assets. This percentage is around 20 percent for large community banks.[9] The difference is not statistically significant.

Table IV presents the correlations between the explanatory variables in 1996 and in the 1996-2000 samples. The findings are similar for 2000 and therefore omitted. Main observations are summarized below:

- Community banks tend to increase their small business (relationship) lending when they face greater competition as predicted by Boot and Thakor (2000) and consistent with the findings of Berger et al. (2001). Banks in fast-growing markets and areas where the median bank size is large tend to make more small business loans.

- Corporate focus tends to increase with size for all banks.

[9]Remember that banks that do not make small business loans are deleted.

- Focused community banks tend to concentrate on small business lending.
- Community banks tend to be more focused when the median bank size in the market is large.
- Banks have less leverage (more capital) in markets where population is growing fast.
- Small business lending tends to decrease with age.
- Small business lending tends to increase with FHLB membership.
- Small business lending is uncorrelated with the level of unemployment in the market.
- Small banks affiliated with BHCs tend to make fewer small business loans. In fact, the larger the BHC, the lower tends to be the level of small business lending.
- Small business lending tends to decrease with an expansion in the branch network ($\Delta SmallBus$ vs. $\Delta Branches$). This is consistent with the findings of DeYoung et al. (1999).

4.2 Results

In the analysis that follows, I will refer to Table VIII when I discuss the economic significance of a change in the asset quality, earnings and capital variables. The table

shows the magnitude of a change in the variable under consideration with a one standard deviation increase in *SmallBus*. It also expresses this change as a percentage of the sample mean of that variable (see Table III for sample means). For the examiner ratings, I study the change in the probability that the bank will have the best rating of "1". The initial probability of having a rating of "1" in each size group is the number of banks with a "1" rating divided by the total number of banks (see Table II). In the case of rating changes from 1996 to 2000, I consider the change in the probability of an improvement in the rating ($\Delta R < 0$). The initial probability is again calculated as the number of banks that improved their ratings by at least one divided by the total number of banks.

Table V shows that the riskiness of the banks' assets increases with small business lending. Clearly, this is to be expected given the high default rate of small businesses. The deterioration in asset quality is both statistically and economically significant. A large community bank that increased its small business lending from 1996 to 2000 by 9 percent, on average suffered an increase in its *ProblemLoan* of 0.18 percent. Although this number seems small at first, when one considers the fact that the average *ProblemLoan* in 1996 was 0.69 percent, it becomes clear that this bank has 26 percent more *ProblemLoan* than an average bank. Also note that problem loans have, on average, declined by 0.06 percent over the 1996-2000 period (Table III). Examiner ratings support this observation. A one standard deviation increase in *SmallBus* reduces the probability of an improvement in a small community bank's A-rating by 7.4 percent. This

corresponds to a 14 percent drop in the initial probability. The decline is statistically insignificant for large community banks.

Table VI shows that earnings, on average, improve with small business lending. 2-SLS estimates show that if we hold the asset quality constant, an increase in small business lending has a positive albeit statistically insignificant effect on ROA. The economic effect, however, is significant. In 2000, a small community bank which had a 10 percent larger small business loan portfolio than an otherwise identical bank, on average improved its ROA by 0.13 percent. Again, one must keep in mind that the average ROA in the sample is around 1 percent. The E-rating does not register any statistically significant change with increasing small business lending. Yet, with the exception of small community banks in 2000, parameter estimates suggest a positive effect. The question that must be answered, though, is whether the higher earnings are enough to compensate for higher risk.

The net effect of higher risk and higher return becomes apparent in the analysis of *AdjRoa, Tier 1*, and *C*. Despite higher ROA, Table VII shows that the risk taking behavior is not necessarily consistent with a high-risk/high-return strategy. Large community banks, which increased their small business lending by 9 percent from 1996 to 2000 lost half of their adjusted ROA. The effect is somewhat smaller but still very significant for small community banks. These banks registered a 37 percent drop in their adjusted ROA when they increased their *SmallBus* by 17 percent. The

analysis of *Tier 1* and examiners' *C* rating indicates a similar trend. A one standard deviation increase in small business lending reduces the small banks' Tier 1 ratio by more than 2 percent. Given that the average Tier 1 ratio in the sample is around 16 percent, the decline is economically significant but not detrimental at this point. Small business lending also hurts the probability of a high C rating or an improvement in the rating. The drop in the probability is especially significant for small community banks. Those that increased their lending by around 17 percent from 1996 to 2000, lost 8 percent from their probability of rating improvement. Given that the original probability was around 48 percent, the drop corresponds to more than 16 percent of the initial probability. These results suggest that community banks were unable to extract the extra rents we would expect them to earn if relationship lending gives the lender a special advantage.

I conclude this section by briefly discussing the effects of the other bank-specific control variables on performance. Tables V, VI and VII show that banks' asset quality and earnings benefit from loan-portfolio concentration (*Focus*). Although I do not control for the type of loans these banks concentrate on, this result is consistent with the corporate focus literature I discussed earlier. Bank Holding Company affiliation also seems to improve bank performance. Moreover, the larger the holding company is relative to the bank, the greater are the benefits of affiliation. Age is an important factor in bank performance. Older banks take on more credit risk and make more money from it. They are better capitalized than younger banks, which may explain their ability to

take more risk. Finally, the extensiveness of the branch network (number of branches per million dollar assets) significantly hurts all ratings. Stein (2002) suggests that the competitive advantage of small banks is their decentralized structure, which enables them to process "soft" -i.e. unverifiable- information. A wide branch network may force the bank to switch to a more hierarchical structure where the loan officer and the manager are not the same person. The loss of the organizational competitive advantage may explain the decline in ratings (also see Nakamura, 1993).

4.3 Robustness Check

Table I shows that 716 banks in 1996, 875 banks in 2000 and 1,432 banks in the 1996-2000 sample have been deleted due to missing CAMELS ratings. Although having missing values in a database is not surprising, another reason might be the fact that banks in good condition are not necessarily examined every year.

Table IX shows that the deleted-banks are, on average, smaller in size and better capitalized than the banks with non-missing CAMELS ratings. There is no statistically significant difference in the size of the small business lending portfolios.

In order to make sure that my results are not affected by the possibility that the deleted banks might be the ones with the best ratings, I repeat the analysis after substituting the missing CAMELS ratings in each year by the ratings from the previous year. Doing so recovers approximately 95 percent of the missing values. Yet, I do not observe any noteworthy changes in the results (see Table X).

Another important point is that the difference between a CAMELS 1 and a CAMELS 2 bank is much less than the difference between, say, a CAMELS 2 and CAMELS 3 bank. In fact, some banks that receive a rating of 1 from the FED, may receive a rating of 2 from OCC, or vice versa. To check whether my findings of rating deterioration only capture a change from CAMELS 1 to CAMELS 2, I ran the regressions again by merging CAMELS 1 and CAMELS 2 banks into a single rating. There was no significant change in the results (see Table XI).

The results on the changes in ratios and ratings from 1996 to 2000 would lose their meaning if they were significant only among those banks that reduced their small business lending ($\Delta SmallBus < 0$). In other words, due to conditions that were specific to those banks and their markets, these institutions might have reduced their small business lending and improved their performance. However, the effect of small business lending may be positive among the institutions that increased their lending ($\Delta SmallBus > 0$). To make sure that banks that increased their lending have indeed been adversely affected, I divide the sample into two groups; one which includes only those institutions with $\Delta SmallBus < 0$ and one which includes those with $\Delta SmallBus > 0$. The results are in Table XII and show that higher small business lending is associated with poorer performance.

In order to make sure that my strong results on *AdjRoa* do not depend on my broad definition of *ProblemLoan*, I run the tests again by excluding the past-due loans from

ProblemLoan. The idea is that small businesses may be paying late but as long as they do not fall in the nonaccrual status, the bank may still be doing okay because no money is lost after all and those late payments may be an important source of fee income. Yet, I find that even this narrower definition of problem loans indicates a decline in asset quality with increasing small business lending (data not shown). Finally, Table XIII shows that even the newly defined *AdjRoa* deteriorates when small business lending increases with the exception of small community banks in year 2000.

Finally, my small business lending variable covers all loans less than $1 million. Yet, the evidence indicates that large bank competition mostly affects the larger loans in the small business pool (Cole et al., 1999; Haynes et al., 1999). Consequently, community banks may still hold a competitive advantage in the very-small business lending area. Table XIV shows the effect of small business loans under $100,000 on community bank performance. I present the results in the 1996 and the 1996-2000 samples. The results in 2000 are the same as 1996 and are therefore omitted. *SmallBus100* is the ratio of small business loans under $100,000 to total assets. *SB100Ratio* is the share of these small loans in the bank's small business loan portfolio. As before, "Δ" indicates the change from 1996 to 2000.

As expected, the E-rating shows that these very-small loans are highly profitable. Note that the effect of *SmallBus* on the E-rating was positive but statistically insignificant in 1996 (Table VI). The effect of *SmallBus100*, however, is both large and

significant. Unfortunately, once the risk is taken into account, the picture looks different. Although it is better to make very-small business loans rather than large small business loans, as indicated by the positive parameter estimate for *SB100Ratio* and $\Delta SB100Ratio$, increasing the size of these very-small loans relative to assets still leads to poor performance. In other words, a community bank can improve its risk-adjusted profitability by dumping its large small-business loans and focusing instead on the very-small end of the market. However, this is true as long as the size of the total small business lending remains constant relative to assets. Hence, these results suggest that community banks will find it difficult to channel more of their assets into small business lending.

5 Policy Implications

In response to concerns that competition and industry consolidation might reduce the number of small banks and leave small businesses with insufficient funding sources, the Title VI of the Gramm-Leach-Bliley Act of 1999 gives community banks - only those with total assets less than $500 million- a new source of low-cost funds. Community banks can now obtain these funds by borrowing from Federal Home Loan Banks (FHLBs), using their existing small business, small farm, and small agribusiness loans as collateral. Previously, banks could borrow from the FHLBs only against their portfolio of home loans. Because FHLB advances are typically cheaper than deposits *at the margin*, they are expected to help community banks stay competitive and preserve

them as a local resource, especially for small businesses.

The opportunity to use small business loans as collateral for FHLB borrowing will reduce the liquidity risk of these loans and make them a more attractive asset to hold. Note that this argument does not mean that community banks will run to FHLBs today to get new advances. Even if no FHLB borrowing occurs, every small business loan now has a valuable option attached to it, which will make it more attractive than some other type of loan that the bank would prefer to lend in the absence of the option.

Table XV shows that community banks are likely to find this new source of funding attractive. Banks that have high levels of small business lending are the ones that are most liquidity constrained, as measured by examiners "L" rating. [10] In other words, the option to use a small business loan as collateral will be most valuable to those banks that are already heavily invested in this loan category. Thought the liquidity benefits may be desirable, increases in small business lending could be problematic.

Nevertheless, the deterioration in bank performance may be a risk policy makers are willing to take to help small firms if increased competition and market consolidation reduce the availability of bank financing for small businesses. But research appears to indicate that this is not the case (Jayaratne and Wolken, 1999; Berger et al., 2002). Small firms in areas with few small banks are no more credit-constrained than firms in areas with many small banks. The same results apply to young small businesses, small

[10]The *liquidity* rating measures the bank's ability to convert its assets into cash at a reasonable cost. In other words, it is about the marketability of the bank's assets.

businesses owned by entrepreneurs with flawed credit histories, and firms with fewer than five employees. One explanation for these observations is that large banks lend to small businesses when there are few small banks in the market. If the availability of bank financing is not affected by market consolidation, it becomes even more difficult to justify the apparent threat to community banks' asset quality and performance.

6 Conclusion

This paper finds that an increase in small business lending by community banks leads to higher credit risk without a compensating higher return.

I argue that two factors may lead to this negative outcome. First, although building customer relationships is the main strength of community banks, growing competition has limited the resources they devote to each borrower. Because small businesses depend on relationship-based bank services, weakening relationships will hurt small businesses and affect small banks' loan quality and profitability. Second, large banks attract the borrowers in the high-quality end of the small business market by using low-cost credit scoring techniques. Community banks are left with a deteriorating borrower pool and shrinking margins due to large-bank competition.

These findings have important implications for current policies which encourage community banks to expand their small business portfolios. These policies may result in heightened credit risk and lower earnings in the future with no clear benefit to small

businesses.

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Table I: **Sample Size**

	1996	**2000**	**1996-2000**
Total Banks	9,591	8,404	6,716
Less Assets>$1 B	384	370	206
Less SmallBus=0	3,587	2,425	2,000
Less Missing Rating	716	875	1,432
Less Other Missing	746	744	2
Sample Size for Logit	**4,158**	**3,990**	**3,076**
Sample Size for OLS	**4,874**	**4,865**	**4,508**

Table II: **Number of Banks at Each C, A, E, L Rating**

	Year: 1996							
	A		**E**		**C**		**L**	
Rating	<$150M	$150M - $1B	<$150M	$150M -$1B	<$150M	$150M - $1B	<$150M	$150M - $1B
1	1651	785	1025	581	1502	687	1280	588
2	992	460	1332	622	1230	598	1418	686
3	162	60	376	92	84	25	139	36
4	35	6	84	14	24	1	9	1
5	7	1	30	3	7	1	1	1

	Year: 2000							
	A		**E**		**C**		**L**	
Rating	<$150M	$150M - $1B	<$150M	$150M -$1B	<$150M	$150M - $1B	<$150M	$150M - $1B
1	1329	830	718	587	1233	714	1057	583
2	975	531	1183	720	1200	694	1320	789
3	215	76	526	118	94	30	159	67
4	31	4	110	17	22	5	14	4
5	1	2	14	1	2	-	1	-

	Year: 1996-2000							
	ΔA		**ΔE**		**ΔC**		**ΔL**	
Rating	<$150M	$150M - $1B	<$150M	$150M -$1B	<$150M	$150M - $1B	<$150M	$150M - $1B
-4	1	-	1	-	-	-	-	-
-3	7	1	13	-	5	-	-	-
-2	45	13	59	16	18	3	11	1
-1	337	129	420	142	245	111	328	131
0	1281	549	1265	554	1567	619	1394	591
1	476	157	394	135	344	122	446	131
2	61	11	59	12	34	7	34	9
3	10	2	7	4	4	1	5	-
4	-	1	-	-	1	-	-	-

Table III: **Summary Statistics (Selected Variables)**

Mean, (Std. Dev.), [Min.-Max.]

	Year: 1996		Year: 2000	
	<$150M	$150M - $1B	<$150M	$150M - $1B
ProblemLoan	0.0081	0.0069	0.0074	0.0064
	(0.0110)	(0.0080)	(0.0111)	(0.0069)
	[-0.0133 - 0.1502]	[-0.0022 - 0.1340]	[-0.0093 - 0.1528]	[-0.0027 - 0.0667]
Roa	0.0102	0.0117	0.0079	0.0113
	(0.0088)	(0.0053)	(0.0115)	(0.0056)
	[-0.1006 - 0.2029]	[-0.0407 - 0.0503]	[-0.1334 - 0.0565]	[-0.0230 - 0.0572]
AdjRoa	0.0043	0.0071	0.0033	0.0075
	(0.0137)	(0.0093)	(0.0145)	(0.0099)
	[-0.1444 - 0.1898]	[-0.1013 - 0.0662]	[-0.1348 - 0.1404]	[-0.0405 - 0.1996]
Tier1	0.1656	0.1394	0.1638	0.1288
	(0.0814)	(0.0556)	(0.0927)	(0.0481)
	[0.0035 - 0.9259]	[0.0367 - 0.7969]	[-0.0017 - 1.4508]	[0.0681 - 0.6788]
SmallBus	0.1974	0.1851	0.2180	0.2039
	(0.1090)	(0.0886)	(0.1154)	(0.0919)
	[0.0001 - 0.6802]	[0.0004 - 0.6118]	[0.0029 - 0.6684]	[0.0002 - 0.5776]
LoantoDep	0.7007	0.7690	0.7964	0.8083
	(0.5778)	(1.0596)	(2.0413)	(0.3157)
	[0.0948 - 23.5692]	[0.0036 - 39.0334]	[0.0180 - 115.4363]	[0.0038 - 11.0320]
MedAsset	13.2036	13.2165	13.3779	13.3514
	(0.5477)	(0.5365)	(0.6893)	(0.6515)
	[7.5802 - 14.6718]	[9.4862 - 14.4920]	[8.2215 - 14.8850]	[8.7529 - 14.8822]
Focus	0.6098	0.6349	0.6293	0.6754
	(0.1446)	(0.1400)	(0.1444)	(0.1383)
	[0.1871 - 1.0000]	[0.0914 - 1.0000]	[0.1558 - 1.0000]	[0.1435 - 0.9977]
Leverage	0.7466	0.7531	0.7502	0.7693
	(0.0786)	(0.0654)	(0.0818)	(0.0669)
	[0.0040 - 0.9334]	[0.3983 - 0.9085]	[0.0000 - 0.9436]	[0.3812 - 0.9158]
Branches	0.0374	0.0244	0.0349	0.0233
	(0.0259)	(0.0136)	(0.0223)	(0.0127)
	[0.0067 - 0.3162]	[0.0012 - 0.1478]	[0.0067 - 0.2347]	[0.0013 - 0.0967]
BhcAsset	0.5713	1.0654	0.4042	0.6047
	(1.2085)	(1.6662)	(0.9215)	(1.2169)
	[0.0000 - 7.9073]	[0.0000 - 7.4822]	[0.0000 - 8.3927]	[0.0000 - 7.1577]
Bhc	0.7306	0.8565	0.6652	0.8607
	(0.4437)	(0.3508)	(0.4720)	(0.3464)
Acquired	0.0333	0.0262	0.0481	0.0368
	(0.1795)	(0.1599)	(0.2140)	(0.1882)
Divested	0.0091	0.0152	0.0013	0.0006
	(0.0947)	(0.1223)	(0.0354)	(0.0243)
Terminated	0.0158	0.0262	0.0038	0.0036
	(0.1246)	(0.1599)	(0.0613)	(0.0595)
ΔProblemLoan	0.0005	-0.0006		
	(0.0125)	(0.0083)		
	[-0.1052 - 0.1098]	[-0.0610 - 0.0497]		
ΔAdjRoa	0.0006	0.0004		
	(0.0149)	(0.0099)		
	[-0.1079 - 0.1603]	[-0.0707 - 0.0564]		
ΔTier1	-0.0210	-0.0122		
	(0.0598)	(0.0442)		
	[-0.7800 - 0.4471]	[-0.4353 - 0.4412]		
ΔSmallBus	0.0459	0.0035		
	(0.1229)	(0.0868)		
	[-0.4477 - 0.6338]	[-0.3159 - 0.3964]		
ΔLoantoDep	0.0844	0.0765		
	(0.1354)	(0.3423)		
	[-1.1822 - 1.3927]	[-5.5568 - 6.6536]		
ΔMedAsset	0.0895	0.1248		
	(0.3520)	(0.3791)		
	[-4.8473 - 3.1908]	[-3.3895 - 2.7342]		
ΔFocus	0.0327	0.0344		
	(0.0995)	(0.0904)		
	[-0.5128 - 0.5784]	[-0.3867 - 0.3993]		
ΔBranches	-0.0058	-0.0024		
	(0.0158)	(0.0094)		
	[-0.2367 - 0.0694]	[-0.0751 - 0.1425]		
ΔBhcAsset	0.1308	0.1068		
	(0.6092)	(0.6071)		
	[-4.4728 - 7.5125]	[-2.9828 - 5.6123]		

Table IV: **Sample Correlations**

Panel A - Year 1996

	SmallBus	Asset	LoantoDep	MedAsset	Focus	Leverage	Branches	BhcAsset	Bhc	Unemployment	ΔPop	LogPop	Charter	Fhlb	Frs	Age
SmallBus	1															
Asset	-0.022	1														
LoantoDep	0.067***	0.045***	1													
MedAsset	0.132***	0.008	0.024*	1												
Focus	0.076***	0.140***	0.089***	0.065***	1											
Leverage	-0.174***	0.089***	-0.084***	-0.089***	0.036**	1										
Branches	-0.012	-0.476***	-0.016	-0.038***	-0.039***	-0.067***	1									
BhcAsset	-0.128***	0.188***	0.082***	0.001	0.021	0.083***	-0.094***	1								
Bhc	-0.093***	0.184***	0.035**	-0.058***	-0.090***	0.169***	-0.053***	0.286***	1							
Unemployment	-0.020	0.011	-0.029**	-0.038***	0.003	-0.005	0.031**	-0.021	-0.095***	1						
ΔPop	0.221***	0.068***	0.014	0.148***	0.198***	-0.200***	-0.055***	0.003	-0.053***	-0.086***	1					
LogPop	0.320***	0.288***	0.048***	0.266***	0.327***	-0.293***	-0.196***	-0.023	-0.141***	-0.146***	0.306***	1				
Charter	-0.043***	0.143***	0.004	-0.019	-0.034**	-0.014	-0.124***	0.066***	0.080***	0.025*	-0.020	0.003	1			
Fhlb	0.078***	0.243***	0.054***	-0.018	0.123***	0.199***	-0.094***	-0.097***	0.166***	-0.034**	0.022	-0.011	0.049***	1		
Frs	-0.004	0.177***	0.010	0.008	-0.011	-0.025*	-0.132***	0.125***	0.093***	-0.006	0.005	0.042***	0.774***	0.038***	1	
Age	-0.368***	0.134***	-0.052***	-0.218***	-0.149***	0.199***	0.007	0.071***	0.225***	0.003	-0.302***	-0.397***	0.054***	0.066***	0.025*	1

Panel B - Years 1996-2000

	ΔSmallBus	ΔAsset	ΔLoantoDep	ΔMedAsset	ΔFocus	ΔLeverage	ΔBranches	ΔBhcAsset	ΔUnemployment	ΔPop
ΔSmallBus	1									
ΔAsset	-0.008	1.000								
ΔLoantoDep	0.092***	0.065***	1.000							
ΔMedAsset	-0.015	0.106***	-0.023	1.000						
ΔFocus	-0.02179	0.03629**	0.0223	0.02416	1					
ΔLeverage	-0.02494	0.34124***	0.09561***	0.02896	0.06524***	1				
ΔBranches	-0.07086***	-0.30851***	-0.02193	-0.0393**	-0.00973	-0.14645***	1			
ΔBhcAsset	0.05539***	-0.13611***	0.01781	0.01794	0.00442	-0.07164***	0.00494	1		
ΔUnemployment	0.01077	-0.03727**	-0.00567	-0.02273	0.01274	0.05386***	-0.0188	-0.00973	1	
ΔPop	0.01441	0.21578***	-0.01665	0.17809***	0.07673***	0.0728***	-0.0249	0.02497	-0.05899***	1

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

Table V: **Risk Effects**

Bank Size	**<$150M**						**$150M - $1B**					
Year	**1996**		**2000**		**1996-2000**		**1996**		**2000**		**1996-2000**	
Dependent Variable	*ProblemLoan*	*A*	*ProblemLoan*	*A*	Δ*ProblemLoan*	Δ*A*	*ProblemLoan*	*A*	*ProblemLoan*	*A*	Δ*ProblemLoan*	Δ*A*
ΔSmallBus	-	-	-	-	0.0146***	-0.7564	-	-	-	-	0.0200***	-0.6115
	-	-	-	-	(0.0024)	(0.4612)	-	-	-	-	(0.0035)	(1.1955)
SmallBus	0.0249***	-3.0918***	0.0267***	-2.5782***	0.0183***	-0.8431	0.0210***	-4.5696***	0.0186***	-2.8469***	0.0182***	-2.0371*
	(0.0019)	(0.4310)	(0.0018)	(0.3896)	(0.0027)	(0.5176)	(0.0025)	(0.7394)	(0.0019)	(0.6857)	(0.0033)	(1.1391)
ΔFocus	-	-	-	-	-0.0088***	0.1204	-	-	-	-	-0.0054**	-1.1653
	-	-	-	-	(0.0025)	(0.4815)	-	-	-	-	(0.0026)	(0.9139)
Focus	-0.0082***	0.9120***	-0.0110***	0.7135**	-0.0100***	1.0948***	-0.0042***	0.1337	-0.0042***	0.2979	-0.0053***	0.4728
	(0.0014)	(0.3134)	(0.0014)	(0.3052)	(0.0019)	(0.3823)	(0.0016)	(0.4516)	(0.0012)	(0.4317)	(0.0017)	(0.6060)
ΔBranches	-	-	-	-	0.0253	-2.0351	-	-	-	-	0.0517*	-5.8284
	-	-	-	-	(0.0186)	(3.6566)	-	-	-	-	(0.0285)	(9.9172)
Branches	0.0134	-4.1766**	0.0145	-5.4492***	0.0086	-2.8795	-0.0222	-1.7107	-0.0081	0.7832	-0.0055	3.3771
	(0.0084)	(1.8108)	(0.0099)	(2.0980)	(0.0122)	(2.4025)	(0.0157)	(4.6190)	(0.0136)	(4.8717)	(0.0195)	(6.8215)
ΔBhcAsset	-	-	-	-	0.0004	-0.1335	-	-	-	-	0.0003	-0.0395
	-	-	-	-	(0.0005)	(0.0925)	-	-	-	-	(0.0005)	(0.1592)
BhcAsset	-0.0004**	0.1520***	-0.0002	0.1022**	-0.0002	0.2342***	0.0000	0.1741***	-0.0003*	0.3425***	-0.0002	0.2020***
	(0.0002)	(0.0388)	(0.0002)	(0.0492)	(0.0003)	(0.0579)	(0.0001)	(0.0445)	(0.0001)	(0.0618)	(0.0002)	(0.0762)
Bhc	-0.0019***	0.1810***	-0.0004	0.1143**	-0.0009	0.1388**	-0.0017***	0.2283***	-0.0009*	-0.0070	-0.0011	0.1557
	(0.0005)	(0.0479)	(0.0005)	(0.0554)	(0.0006)	(0.0627)	(0.0006)	(0.0877)	(0.0005)	(0.0884)	(0.0008)	(0.1369)
ΔUnemployment	-	-	-	-	0.0000	-0.0061	-	-	-	-	0.0002	-0.2640***
	-	-	-	-	(0.0002)	(0.0417)	-	-	-	-	(0.0003)	(0.0934)
Unemployment	0.0003***	-0.0999***	0.0001	-0.0859***	0.0002	-0.0856***	0.0003***	-0.0908***	0.0004***	-0.0926***	0.0002	-0.1175***
	(0.0001)	(0.0158)	(0.0001)	(0.0201)	(0.0001)	(0.0229)	(0.0001)	(0.0261)	(0.0001)	(0.0293)	(0.0001)	(0.0420)
ΔPop	0.0066	-2.6842	0.0045	0.3601	-0.0099	0.7108	0.0392***	-4.0145	-0.0249***	2.0400	-0.0288**	5.6787
	(0.0080)	(1.7106)	(0.0081)	(1.7322)	(0.0106)	(2.0514)	(0.0137)	(4.1001)	(0.0087)	(2.9867)	(0.0142)	(4.9300)
LogPop	0.0013*	-0.3232**	0.0002	0.0133	-0.0016	0.1483	0.0044***	-0.4699	-0.0023***	0.3335	-0.0024*	0.6475
	(0.0008)	(0.1646)	(0.0008)	(0.1645)	(0.0010)	(0.1978)	(0.0012)	(0.3592)	(0.0008)	(0.2724)	(0.0013)	(0.4418)
LogPop x ΔPop	-0.0008	0.1725	-0.0003	-0.0529	0.0011	-0.0887	-0.0034***	0.3677	0.0020***	-0.2274	0.0022*	-0.4761
	(0.0007)	(0.1440)	(0.0007)	(0.1427)	(0.0009)	(0.1749)	(0.0011)	(0.3204)	(0.0007)	(0.2376)	(0.0011)	(0.3926)
Age	0.0011***	-0.1860***	0.0014***	-0.1072***	0.0001	-0.0250	0.0002	0.0370	0.0010***	-0.0260	0.0006	0.1653
	(0.0002)	(0.0434)	(0.0002)	(0.0413)	(0.0003)	(0.0651)	(0.0003)	(0.0766)	(0.0002)	(0.0710)	(0.0003)	(0.1199)
Acquired	-0.0003	-0.1610	-0.0007	0.0407	0.0004	-0.0864	0.0036***	-0.2417	-0.0009	0.2089	-0.0011	0.1523
	(0.0010)	(0.1074)	(0.0009)	(0.0975)	(0.0006)	(0.0607)	(0.0013)	(0.1694)	(0.0009)	(0.1667)	(0.0006)	(0.1134)
Divested	0.0014	0.2109	0.0009	-0.9956*	0.0026	-0.4919	-0.0029*	0.1865	-0.0037	-0.6860	-0.0023	0.0762
	(0.0019)	(0.2292)	(0.0052)	(0.5413)	(0.0032)	(0.3020)	(0.0017)	(0.2548)	(0.0065)	(0.9817)	(0.0028)	(0.4722)
Terminated	0.0019	-0.2312	0.0002	-0.0129	-0.0011	-0.3746*	0.0008	-0.5754***	0.0060**	-1.6400***	0.0011	-0.1720
	(0.0015)	(0.1648)	(0.0031)	(0.3397)	(0.0023)	(0.2248)	(0.0013)	(0.1847)	(0.0028)	(0.5895)	(0.0020)	(0.3656)
R^2 or Max. Rescaled R^2	8.53	10.70	10.15	8.25	31.99	39.87	11.49	12.62	12.98	12.85	46.14	44.91

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

Table VI: **Earnings Effects**

Bank Size	**<$150M**						**$150M - $1B**					
Year	**1996**			**2000**			**1996**			**2000**		
Dependent Variable	*ROA* (OLS)	*ROA* (2-SLS)	E	*ROA* (OLS)	*ROA* (2-SLS)	E	*ROA* (OLS)	*ROA* (2-SLS)	E	*ROA* (OLS)	*ROA* (2-SLS)	E
ProblemLoan	-	-0.0630	-	-	-0.0376	-	-	-0.2754	-	-	-0.1033	-
	-	(0.2734)	-	-	(0.3092)	-	-	(0.2314)	-	-	(0.1709)	-
SmallBus	0.0072***	0.0087	0.5713	0.0120***	0.0130	-0.3523	0.0021	0.0078	1.0404	0.0016	0.0036	0.7703
	(0.0014)	(0.0069)	(0.4097)	(0.0016)	(0.0083)	(0.3935)	(0.0017)	(0.0050)	(0.7003)	(0.0015)	(0.0035)	(0.6692)
LoantoDep	-0.0017***	-0.0017***	0.3493	0.0003***	0.0003***	0.1201	0.0000	0.0001	-0.0464	0.0003	0.0006	0.0681
	(0.0002)	(0.0003)	(0.2640)	(0.0001)	(0.0001)	(0.2405)	(0.0001)	(0.0001)	(0.0502)	(0.0004)	(0.0006)	(0.1802)
Focus	0.0052***	0.0047*	0.9065***	0.0026**	0.0021	0.4964*	0.0066***	0.0054***	1.6188***	0.0048***	0.0043***	1.6442***
	(0.0011)	(0.0025)	(0.2943)	(0.0013)	(0.0036)	(0.2997)	(0.0010)	(0.0014)	(0.4305)	(0.0010)	(0.0012)	(0.4200)
Leverage	-0.0254***	-0.0249***	-5.2746***	-0.0204***	-0.0201***	-6.4583***	-0.0173***	-0.0173***	-4.3659***	-0.0280***	-0.0282***	-11.0764***
	(0.0020)	(0.0025)	(0.5573)	(0.0022)	(0.0026)	(0.5592)	(0.0023)	(0.0023)	(0.9883)	(0.0020)	(0.0020)	(0.9695)
Branches	-0.0359***	-0.0343***	-12.3969***	-0.0704***	-0.0696***	-16.0290***	-0.0278***	-0.0356***	-3.0065	-0.0456***	-0.0457***	-15.0113***
	(0.0062)	(0.0073)	(1.7347)	(0.0088)	(0.0100)	(2.0826)	(0.0102)	(0.0111)	(4.3484)	(0.0105)	(0.0104)	(4.7055)
BhcAsset	0.0004***	0.0004**	0.1123***	-0.0001	-0.0001	0.1571***	0.0001	0.0001	0.1034***	0.0005***	0.0005***	0.2552***
	(0.0001)	(0.0002)	(0.0342)	(0.0002)	(0.0002)	(0.0471)	(0.0001)	(0.0001)	(0.0397)	(0.0001)	(0.0001)	(0.0524)
Bhc	0.0007*	0.0005	0.1535***	0.0018***	0.0018***	0.1807***	0.0005	0.0000	0.1416	-0.0003	-0.0004	0.0082
	(0.0003)	(0.0006)	(0.0458)	(0.0005)	(0.0005)	(0.0542)	(0.0004)	(0.0005)	(0.0866)	(0.0004)	(0.0004)	(0.0872)
Unemployment	-0.0001	-0.0001	-0.0177	-0.0001	-	-0.0269	-0.0002**	-0.0001	-0.0093	-0.0001	-	-0.0350
	(0.0001)	(0.0001)	(0.0153)	(0.0001)	-	(0.0199)	(0.0001)	(0.0001)	(0.0254)	(0.0001)	-	(0.0292)
ΔPop	-0.0136**	-0.0136**	-4.5817***	-0.0101	-0.0106	-2.5566	-0.0095	0.0014	-10.9037***	0.0083	0.0069	0.6034
	(0.0060)	(0.0062)	(1.6207)	(0.0072)	(0.0073)	(1.6895)	(0.0089)	(0.0124)	(3.8459)	(0.0067)	(0.0079)	(2.9503)
LogPop	-0.0025***	-0.0024***	-0.8015***	-0.0023***	-0.0021***	-0.4914***	-0.0015*	-0.0003	-1.1982***	0.0005	0.0003	-0.0306
	(0.0006)	(0.0007)	(0.1561)	(0.0007)	(0.0007)	(0.1604)	(0.0008)	(0.0012)	(0.3399)	(0.0006)	(0.0007)	(0.2680)
Msa	0.0008	-	0.2171***	0.0017**	-	0.1987**	0.0000	-	-0.0290	-0.0005	-	-0.0559
	(0.0006)	-	(0.0785)	(0.0007)	-	(0.0809)	(0.0005)	-	(0.0990)	(0.0005)	-	(0.1003)
Fhlb	0.0006**	0.0005	-0.0146	-0.0004	-0.0003	0.0039	0.0000	-0.0004	-0.0968	0.0003	0.0002	0.1086
	(0.0003)	(0.0004)	(0.0404)	(0.0004)	(0.0004)	(0.0431)	(0.0003)	(0.0004)	(0.0631)	(0.0003)	(0.0003)	(0.0711)
Frs	-0.0011**	-0.0013***	-0.1977***	-0.0009*	-0.0009**	-0.2707***	-0.0006	-0.0009***	0.0617	-0.0007**	-0.0009***	-0.1564**
	(0.0004)	(0.0003)	(0.0599)	(0.0006)	(0.0003)	(0.0645)	(0.0004)	(0.0003)	(0.0828)	(0.0003)	(0.0003)	(0.0767)
Age	0.0026***	0.0026***	0.4868***	0.0036***	0.0037***	0.4344***	0.0014***	0.0014***	0.4454***	0.0012***	0.0013***	0.4679***
	(0.0002)	(0.0003)	(0.0411)	(0.0002)	(0.0005)	(0.0409)	(0.0002)	(0.0002)	(0.0743)	(0.0002)	(0.0002)	(0.0705)
Acquired	-0.0023***	-0.0023***	-0.1964*	-0.0054***	-0.0055***	-0.1448	-0.0002	0.0008	-0.2052	-0.0023***	-0.0024***	-0.2467*
	(0.0008)	(0.0008)	(0.1036)	(0.0008)	(0.0008)	(0.0921)	(0.0008)	(0.0012)	(0.1671)	(0.0007)	(0.0007)	(0.1436)
Divested	-0.0048***	-0.0047***	-0.3285*	-0.0074	-0.0074	-0.2558	-0.0017	-0.0025*	-0.1514	-0.0006	-0.0010	-1.4019
	(0.0014)	(0.0015)	(0.1893)	(0.0047)	(0.0046)	(0.5492)	(0.0011)	(0.0013)	(0.2246)	(0.0050)	(0.0051)	(0.9452)
Terminated	-0.0021*	-0.0019	0.0896	-0.0056**	-0.0055**	-0.2487	-0.0031***	-0.0029***	-0.2080	-0.0124***	-0.0119***	-2.1550***
	(0.0011)	(0.0012)	(0.1577)	(0.0027)	(0.0027)	(0.3317)	(0.0008)	(0.0008)	(0.1828)	(0.0021)	(0.0024)	(0.5824)
Max. Rescaled R^2 or R^2	21.03	21.32	19.3	35.92	36.07	28.14	15.22	15.30	13.39	18.62	18.44	20.32

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

Table VII: **Is the Risk Justified?**

Panel A - Small Banks (<$150 M)

Year	**1996**			**2000**			**1996-2000**		
Dependent Variable	*AdjRoa*	*Tier 1*	*C*	*AdjRoa*	*Tier 1*	*C*	$\Delta AdjRoa$	$\Delta Tier1$	ΔC
ΔSmallBus	-	-	-	-	-	-	-0.0148***	-0.0607***	-1.6124***
	-	-	-	-	-	-	(0.0028)	(0.0083)	(0.5293)
SmallBus	-0.0168***	-0.2619***	-3.2899***	-0.0106***	-0.2459***	-3.5006***	-0.0198***	-0.0564***	-1.1525**
	(0.0024)	(0.0118)	(0.4475)	(0.0024)	(0.0123)	(0.4177)	(0.0032)	(0.0094)	(0.5872)
ΔLoantoDep	-	-	-	-	-	-	0.0052**	-0.0696***	0.2104
	-	-	-	-	-	-	(0.0022)	(0.0065)	(0.4073)
LoantoDep	-0.0019***	0.0082***	-0.6902**	0.0002**	-0.0010	0.0110	0.0002	-0.0172***	-1.3066***
	(0.0004)	(0.0020)	(0.2908)	(0.0001)	(0.0006)	(0.0295)	(0.0021)	(0.0066)	(0.4032)
ΔFocus	-	-	-	-	-	-	0.0092***	0.0425***	0.0614
	-	-	-	-	-	-	(0.0029)	(0.0087)	(0.5540)
Focus	0.0105***	0.0539***	1.4657***	0.0099***	0.0677***	1.3260***	0.0069***	0.0289***	1.0944**
	(0.0018)	(0.0089)	(0.3212)	(0.0019)	(0.0097)	(0.3242)	(0.0023)	(0.0069)	(0.4411)
ΔBranches	-	-	-	-	-	-	-0.1106***	-0.1485**	-14.4708***
	-	-	-	-	-	-	(0.0224)	(0.0662)	(4.0957)
Branches	-0.0435***	-0.2477***	-11.5042***	-0.0803***	-0.1155*	-17.6427***	-0.0539***	-0.1809***	-9.3573***
	(0.0103)	(0.0516)	(1.8789)	(0.0128)	(0.0669)	(2.2678)	(0.0147)	(0.0436)	(2.7168)
ΔBhcAsset	-	-	-	-	-	-	-0.0012**	-0.0029*	-0.1304
	-	-	-	-	-	-	(0.0006)	(0.0017)	(0.1043)
BhcAsset	0.0008***	-0.0026**	0.0136	0.0001	-0.0031**	0.0444	0.0005	-0.0002	0.2162***
	(0.0002)	(0.0010)	(0.0360)	(0.0003)	(0.0015)	(0.0493)	(0.0003)	(0.0010)	(0.0631)
Bhc	0.0025***	-0.0271***	-0.0873*	0.0016**	-0.0241***	-0.1409**	0.0009	-0.0106***	0.0443
	(0.0006)	(0.0028)	(0.0503)	(0.0007)	(0.0035)	(0.0601)	(0.0008)	(0.0023)	(0.0723)
Unemployment	-0.0004***	0.0009*	-0.0445***	-0.0001	-0.0002	-0.0930***	-0.0001	0.0004	-0.0830***
	(0.0001)	(0.0005)	(0.0164)	(0.0001)	(0.0007)	(0.0216)	(0.0001)	(0.0004)	(0.0264)
ΔPop	-0.0147	0.0595	-3.2729*	-0.0100	0.0550	-0.9496	0.0167	-0.0420	-1.4002
	(0.0098)	(0.0495)	(1.7438)	(0.0104)	(0.0545)	(1.8391)	(0.0127)	(0.0371)	(2.4214)
LogPop	-0.0033***	0.0063	-0.3840**	-0.0021**	0.0068	-0.0788	0.0020	-0.0060*	-0.2102
	(0.0009)	(0.0048)	(0.1680)	(0.0010)	(0.0052)	(0.1752)	(0.0012)	(0.0036)	(0.2334)
Msa	0.0017*	0.0020	0.1069	0.0011	-0.0038	0.0111	-0.0009	0.0010	0.0483
	(0.0010)	(0.0048)	(0.0841)	(0.0010)	(0.0053)	(0.0875)	(0.0011)	(0.0034)	(0.1069)
Fhlb	0.0013***	-0.0141***	-0.1261***	0.0005	-0.0164***	-0.1230***	0.0001	-0.0024	-0.1194**
	(0.0005)	(0.0025)	(0.0432)	(0.0005)	(0.0028)	(0.0461)	(0.0006)	(0.0018)	(0.0565)
Frs	-0.0018**	-0.0010	0.0468	-0.0004	-0.0113***	-0.0700	0.0018*	-0.0022	-0.1474
	(0.0007)	(0.0037)	(0.0653)	(0.0008)	(0.0042)	(0.0702)	(0.0010)	(0.0031)	(0.0977)
Age	0.0009***	-0.0015	0.1389***	0.0017***	-0.0062***	0.0858*	-0.0009**	0.0051***	0.0977
	(0.0002)	(0.0013)	(0.0430)	(0.0002)	(0.0013)	(0.0439)	(0.0004)	(0.0012)	(0.0744)
Acquired	-0.0017	0.0139**	-0.0536	-0.0042***	0.0067	0.0118	-0.0012*	-0.0043**	-0.1096
	(0.0013)	(0.0063)	(0.1114)	(0.0011)	(0.0059)	(0.1011)	(0.0007)	(0.0022)	(0.0692)
Divested	-0.0060**	-0.0057	-0.1909	-0.0074	-0.0122	-1.3132**	-0.0055	-0.0257**	-0.6854**
	(0.0024)	(0.0119)	(0.2002)	(0.0067)	(0.0352)	(0.5770)	(0.0038)	(0.0112)	(0.3239)
Terminated	-0.0031*	-0.0056	-0.2046	-0.0066*	-0.0127	0.3771	-0.0016	-0.0083	-0.5922**
	(0.0018)	(0.0093)	(0.1628)	(0.0040)	(0.0207)	(0.3649)	(0.0028)	(0.0082)	(0.2516)
Max. Rescaled R^2 or R^2	11.55	36.52	16.34	13.67	42.93	19.72	31.4	62.95	44.55

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

Panel B - Larger Banks ($150 M - $1 B)

Year	**1996**			**2000**			**1996-2000**		
Dependent Variable	*AdjRoa*	*Tier 1*	*C*	*AdjRoa*	*Tier 1*	*C*	$\Delta AdjRoa$	$\Delta Tier1$	ΔC
ΔSmallBus	-	-	-	-	-	-	-0.0219***	-0.0779***	0.6669
	-	-	-	-	-	-	(0.0044)	(0.0193)	(1.3024)
SmallBus	-0.0159***	-0.2453***	-4.1405***	-0.0173***	-0.1649***	-3.1171***	-0.0193***	-0.0471**	-1.1490
	(0.0030)	(0.0154)	(0.7706)	(0.0028)	(0.0118)	(0.7233)	(0.0041)	(0.0191)	(1.2409)
ΔLoantoDep	-	-	-	-	-	-	-0.0006	-0.0078**	-0.0268
	-	-	-	-	-	-	(0.0009)	(0.0039)	(0.3211)
LoantoDep	-0.0002	0.0020*	0.0810	-0.0012	-0.0173***	-0.2881	-0.0017**	-0.0085***	-0.3043
	(0.0002)	(0.0012)	(0.0569)	(0.0008)	(0.0032)	(0.1778)	(0.0008)	(0.0033)	(0.2412)
ΔFocus	-	-	-	-	-	-	0.0037	0.0174	-0.2816
	-	-	-	-	-	-	(0.0033)	(0.0145)	(0.9920)
Focus	0.0070***	0.0570***	1.0494**	0.0075***	0.0201***	0.5120	0.0070***	0.0185*	0.6746
	(0.0018)	(0.0094)	(0.4578)	(0.0018)	(0.0075)	(0.4448)	(0.0022)	(0.0097)	(0.6663)
ΔBranches	-	-	-	-	-	-	-0.1802***	0.7292***	-17.9121*
	-	-	-	-	-	-	(0.0362)	(0.1575)	(10.8820)
Branches	-0.0104	-0.5388***	-7.0673	-0.0476**	-0.4068***	-15.7184***	-0.0786***	0.1877*	1.1443
	(0.0182)	(0.0949)	(4.6732)	(0.0198)	(0.0831)	(5.0262)	(0.0247)	(0.1081)	(7.5172)
ΔBhcAsset	-	-	-	-	-	-	-0.0010*	0.0033	-0.3631**
	-	-	-	-	-	-	(0.0006)	(0.0025)	(0.1711)
BhcAsset	0.0002	-0.0060***	-0.0223	0.0005**	-0.0028***	0.1881***	0.0002	0.0026**	0.2217***
	(0.0002)	(0.0009)	(0.0416)	(0.0002)	(0.0009)	(0.0565)	(0.0003)	(0.0012)	(0.0823)
Bhc	0.0020***	-0.0156***	0.0074	0.0013*	-0.0156***	-0.0566	0.0007	-0.0085*	0.0092
	(0.0007)	(0.0038)	(0.0926)	(0.0007)	(0.0031)	(0.0941)	(0.0010)	(0.0044)	(0.1539)
Unemployment	-0.0004***	0.0016***	-0.0394	-0.0004***	0.0017***	0.0074	-0.0002	-0.0003	-0.0371
	(0.0001)	(0.0006)	(0.0267)	(0.0001)	(0.0005)	(0.0310)	(0.0001)	(0.0006)	(0.0457)
ΔPop	-0.0414***	-0.0300	-2.8471	0.0270**	0.0521	3.3871	0.0529***	-0.1034	8.9096*
	(0.0158)	(0.0826)	(4.0774)	(0.0126)	(0.0530)	(3.1405)	(0.0180)	(0.0779)	(5.4149)
LogPop	-0.0052***	-0.0022	-0.3457	0.0018	0.0037	0.2526	0.0044***	-0.0122*	0.8073*
	(0.0014)	(0.0072)	(0.3586)	(0.0012)	(0.0048)	(0.2864)	(0.0016)	(0.0070)	(0.4848)
Msa	0.0007	-0.0006	0.0492	0.0002	0.0040	0.1111	-0.0007	0.0054	0.0801
	(0.0008)	(0.0044)	(0.1043)	(0.0009)	(0.0037)	(0.1062)	(0.0010)	(0.0043)	(0.1481)
Fhlb	0.0009*	-0.0148***	-0.1633**	0.0008	-0.0177***	-0.2152***	-0.0008	-0.0088***	-0.2935***
	(0.0005)	(0.0028)	(0.0670)	(0.0006)	(0.0026)	(0.0778)	(0.0006)	(0.0028)	(0.0978)
Frs	0.0008	0.0013	0.4121***	0.0001	-0.0025	-0.0204	-0.0007	-0.0074**	0.0600
	(0.0007)	(0.0037)	(0.0931)	(0.0007)	(0.0027)	(0.0818)	(0.0008)	(0.0034)	(0.1203)
Age	0.0007**	0.0096***	0.4155***	-0.0007**	0.0093***	0.5284***	-0.0012***	-0.0017	0.5067***
	(0.0003)	(0.0016)	(0.0793)	(0.0003)	(0.0013)	(0.0756)	(0.0004)	(0.0019)	(0.1360)
Acquired	-0.0037**	0.0152**	-0.0166	-0.0017	-0.0047	-0.4215***	0.0005	-0.0041	0.0904
	(0.0015)	(0.0076)	(0.1766)	(0.0013)	(0.0052)	(0.1549)	(0.0008)	(0.0036)	(0.1232)
Divested	0.0011	0.0059	-0.3685	0.0023	0.0148	-0.4412	0.0012	-0.0261*	-0.3120
	(0.0019)	(0.0100)	(0.2435)	(0.0095)	(0.0397)	(1.2174)	(0.0036)	(0.0157)	(0.5209)
Terminated	-0.0037**	-0.0026	-0.3908**	-0.0154***	0.0078	-1.1182*	-0.0041	-0.0430***	-0.2336
	(0.0015)	(0.0077)	(0.1971)	(0.0040)	(0.0168)	(0.6136)	(0.0026)	(0.0113)	(0.4081)
Max. Rescaled R^2 or R^2	12.04	32.66	16.52	10.04	33.13	22.71	38.71	42.29	46.08

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

Table VIII: **The Effects of Small Business Lending on Bank Performance**

$\Delta ProblemLoan$ represents the change in *ProblemLoan* with a one-standard-deviation increase in *SmallBus*. $\Delta AdjRoa$ and $\Delta Tier\ 1$ are defined similarly.

$\Delta \Pr(R = 1\ or\ \Delta R < 0 | \boldsymbol{x}, \Delta SmallBus)$ is the change in the probability that the rating will be strictly better than i, given a one standard deviation increase in the small business lending variable. In the 1996-2000 sample, it represents the change in the probability of an improvement in the rating.

$\Delta SmallBus$ represents the magnitude of a one-standard-deviation increase in *SmallBus* in each sample. The numbers in parentheses express the change as a percentage of the mean sample value of each variable. All numbers are percentages.

Bank Size	**<$150M**			**$150M - $1B**		
Year	1996	2000	1996-2000	1996	2000	1996-2000
ΔSmallBus	10.90	11.54	16.88	8.86	9.19	9.04
$\Delta ProblemLoan$	0.27***	0.19***	0.31***	0.17***	0.25***	0.18***
	(33.48)	(26.89)	(41.63)	(26.79)	(30.43)	(26.14)
$\Delta AdjRoa$	-0.18***	-0.17***	-0.12***	-0.20***	-0.25***	-0.37***
	(-42.93)	(-24.42)	(-37.36)	(-26.75)	(-58.83)	(-52.05)
$\Delta Tier1$	-2.32***	-2.17***	-2.26***	-1.52***	-0.55***	-0.70***
	(-14.01)	(-15.59)	(-13.80)	(-11.77)	(-3.31)	(-5.05)
$\Delta \Pr(A = 1\ or\ \Delta A < 0 \mid \boldsymbol{x}, \Delta SmallBus)$	-8.36***	-9.99***	-7.42***	-6.49***	-1.77	-0.75
	(-14.41)	(-16.69)	(-14.24)	(-11.28)	(-10.09)	(-4.53)
$\Delta \Pr(C = 1\ or\ \Delta C < 0 \mid \boldsymbol{x}, \Delta SmallBus)$	-7.27***	-9.12***	-7.93***	-7.10***	-1.46***	0.71
	(-13.78)	(-17.43)	(-16.40)	(-14.36)	(-12.12)	(5.35)

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

Table IX: **Missing Ratings**

1996

	Missing Rating	Non-missing	Difference of Means
Asset ($ 000)	111,112	155,549	-44,437***
Leverage	0.735	0.751	-0.016***
Focus	0.605	0.620	-0.015**
SmallBus	0.190	0.194	-0.005
population	1,044,906	1,408,592	-363,686***
Population Growth	0.119	0.118	0.000
Fraction in MSA	0.532	0.559	-0.027
Age (years)	57.4	58.7	-1.291
BHC Membership	0.733	0.774	-0.041**

2000

	Missing Rating	Non-missing	Difference of Means
Asset ($ 000)	118,204	170,006	-51,802***
Leverage	0.753	0.758	-0.005*
Focus	0.651	0.644	0.007
SmallBus	0.213	0.213	0.000
population	1,164,718	1,274,578	-109,860
Population Growth	0.127	0.125	0.002
Fraction in MSA	0.515	0.552	-0.036*
Age (years)	58.8	56.2	2.528*
BHC Membership	0.767	0.726	0.041***

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

Table X: **Robustness Check**

Missing CAMELS

Dependent Variable	**A**		**ΔA**	**E**		**ΔE**	**C**		**ΔC**
Year	1996	2000	1996-2000	1996	2000	1996-2000	1996	2000	1996-2000
ΔSmallBus	-	-	-0.8104**	-	-	-0.0075	-	-	-1.4148***
	-	-	(0.3440)	-	-	0.3416	-	-	(0.3883)
SmallBus	-3.7527***	-2.5160***	-1.2897***	0.708**	-0.0806	0.1471	-3.8614***	-3.1200***	-1.4862***
	(0.3243)	(0.3024)	(0.3722)	0.3075	0.2963	0.3607	(0.3393)	(0.3172)	(0.4098)
ΔFocus	-	-	-0.4159	-	-	0.2113	-	-	0.3038
	-	-	(0.3533)	-	-	0.3517	-	-	(0.3967)
Focus	0.5759**	0.4649**	0.9050***	1.0559***	0.7897***	0.7536***	1.2204***	0.9723***	1.3260***
	(0.2316)	(0.2261)	(0.2658)	0.2201	0.2184	0.2622	(0.2383)	(0.2347)	(0.2991)
ΔBranches	-	-	-1.4064	-	-	-30.9508***	-	-	-17.6724***
	-	-	(2.7668)	-	-	2.7611	-	-	(3.0445)
Branches	-3.7669***	-3.8448**	-1.0565	-8.929***	-16.0107***	-14.6161***	-9.2237***	-16.0169***	-10.0986***
	(1.4326)	(1.6762)	(1.7184)	1.3753	1.6428	1.7205	(1.4944)	(1.7815)	(1.9112)
ΔBhcAsset	-	-	-0.0702	-	-	-0.0496	-	-	-0.1802**
	-	-	(0.0675)	-	-	0.0662	-	-	(0.0738)
BhcAsset	0.1508***	0.1998***	0.2077***	0.0947***	0.2095***	0.196***	0.0026	0.0775**	0.2000***
	(0.0265)	(0.0343)	(0.0389)	0.0235	0.0309	0.0374	(0.0246)	(0.0322)	(0.0419)
Bhc	0.1658***	0.0752*	0.1066**	0.1336***	0.1568***	0.1194**	-0.1060***	-0.1706***	-0.0085
	(0.0383)	(0.0420)	(0.0468)	0.0372	0.0409	0.0468	(0.0407)	(0.0453)	(0.0534)
ΔUnemployment	-	-	-0.0150	-	-	0.0328	-	-	-0.0141
	-	-	(0.0325)	-	-	0.0324	-	-	(0.0367)
Unemployment	-0.0783***	-0.0874***	-0.0748***	-0.0222*	-0.0222	-0.0251	-0.0386***	-0.0581***	-0.0483***
	(0.0123)	(0.0152)	(0.0164)	0.012	0.0151	0.0163	(0.0128)	(0.0161)	(0.0184)
ΔPop	-3.0149**	0.2484	1.2219	-5.7137***	-2.1746*	-1.6372	-3.4127**	0.9148	0.2698
	(1.4195)	(1.3618)	(1.5406)	1.3563	1.3146	1.5225	(1.4511)	(1.4228)	(1.7581)
LogPop	-0.3790***	0.0877	0.2079	-0.8715***	-0.3741***	-0.2093	-0.4003***	0.0940	-0.0020
	(0.1325)	(0.1276)	(0.1463)	0.1273	0.1232	0.1445	(0.1357)	(0.1336)	(0.1667)
LogPop x ΔPop	0.2402**	-0.0541	-0.1305	0.5677***	0.1885*	0.0978	0.2262*	-0.1641	-0.0670
	(0.1167)	(0.1113)	(0.1293)	0.112	0.1074	0.1275	(0.1193)	(0.1165)	(0.1475)
Acquired	-0.1865**	0.0805	-0.0075	-0.0965	-0.1811**	-0.0736*	-0.0205	-0.0619	-0.0521
	(0.0839)	(0.0771)	(0.0441)	0.082	0.0709	0.044	(0.0879)	(0.0764)	(0.0492)
Divested	0.1332	-1.0217**	-0.3698	-0.2474*	-0.6731	-0.1248	-0.2061	-1.1593**	-0.1943
	(0.1574)	(0.4745)	(0.2271)	0.137	0.4762	0.2319	(0.1450)	(0.5164)	(0.2530)
Terminated	-0.4191***	-0.5082**	-0.3503**	-0.0629	-0.7204***	-0.5262***	-0.3181***	-0.3073	-0.5231***
	(0.1110)	(0.2397)	(0.1574)	0.1092	0.2365	0.1568	(0.1147)	(0.2524)	(0.1755)
Max. Rescaled R^2	9.41	9.42	42.11	17.89	27.57	41.30	15.95	18.60	43.97

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

Table XI: **Robustness Check**

CAMELS 1 and 2 Combined

Dependent Variable	**A**		**ΔA**	**E**		**ΔE**	**C**		**ΔC**
Year	1996	2000	1996-2000	1996	2000	1996-2000	1996	2000	1996-2000
ΔSmallBus	-	-	-2.1847***	-	-	-0.8129	-	-	-1.0499
	-	-	(0.6865)	-	-	(0.5574)	-	-	(0.9289)
SmallBus	-3.3992***	-2.6658***	-2.3709***	1.3057***	-0.7443*	-0.8222	-2.3170***	-2.5433***	-0.9280
	(0.6319)	(0.5780)	(0.7141)	(0.4746)	(0.4277)	(0.5922)	(0.8378)	(0.8298)	(0.9794)
ΔFocus	-	-	-0.1209	-	-	0.3153	-	-	-0.5659
	-	-	(0.7067)	-	-	(0.5732)	-	-	(0.9425)
Focus	0.9368*	0.7962*	0.5686	1.1071***	0.6029*	0.5392	1.5302**	0.8464	0.9996
	(0.5054)	(0.4560)	(0.5518)	(0.3711)	(0.3392)	(0.4475)	(0.6770)	(0.6584)	(0.7807)
ΔBranches	-	-	-4.0983	-	-	-28.6426***	-	-	-10.4830*
	-	-	(5.0517)	-	-	(4.3197)	-	-	(6.0705)
Branches	-8.6828***	-6.6233**	-5.3896*	-14.8552***	-14.8626***	-16.3065***	-13.9295***	-15.2689***	-11.5364***
	(2.8624)	(2.9707)	(3.2358)	(2.1104)	(2.3169)	(2.7518)	(3.4378)	(3.8754)	(3.9870)
ΔBhcAsset	-	-	-0.1401	-	-	-0.3559***	-	-	-0.1192
	-	-	(0.1774)	-	-	(0.1126)	-	-	(0.2332)
BhcAsset	0.2617***	0.2972***	0.3811***	0.0939**	0.1576***	0.2788***	0.6224***	0.6762***	0.5344***
	(0.0850)	(0.0951)	(0.1152)	(0.0475)	(0.0573)	(0.0700)	(0.1846)	(0.2021)	(0.1478)
Bhc	0.2669***	0.1408*	0.2456***	0.2162***	0.1106*	0.1025	0.1142	-0.1639	0.0952
	(0.0764)	(0.0819)	(0.0884)	(0.0582)	(0.0618)	(0.0763)	(0.1037)	(0.1229)	(0.1258)
ΔUnemployment	-	-	-0.0082	-	-	0.0478	-	-	-0.0470
	-	-	(0.0610)	-	-	(0.0532)	-	-	(0.0833)
Unemployment	-0.1269***	-0.0943***	-0.0736**	-0.0404*	-0.0320	-0.0413	-0.1034***	-0.1098***	-0.0887**
	(0.0222)	(0.0263)	(0.0303)	(0.0207)	(0.0230)	(0.0274)	(0.0325)	(0.0359)	(0.0407)
ΔPop	-5.8827*	0.1856	7.1328**	-10.3031***	-2.5851	-1.7582	-0.6693	-3.7892	0.7812
	(3.3980)	(2.8217)	(3.1726)	(2.2708)	(1.9703)	(2.5921)	(5.5941)	(3.7967)	(4.3535)
LogPop	-0.8304***	0.0503	0.7739***	-1.2979***	-0.3504*	-0.1941	-0.5168	-0.3717	0.0497
	(0.3083)	(0.2639)	(0.2928)	(0.2108)	(0.1806)	(0.2431)	(0.4727)	(0.3514)	(0.4094)
LogPop x ΔPop	0.5046*	-0.0116	-0.6035**	0.8651***	0.1668	0.1086	0.0995	0.2082	-0.1450
	(0.2740)	(0.2319)	(0.2615)	(0.1837)	(0.1556)	(0.2147)	(0.4232)	(0.3038)	(0.3592)
Acquired	-0.0966	0.3524*	-0.1529*	-0.2165*	-0.0924	-0.1020	-0.1258	0.0067	-0.1261
	(0.1843)	(0.2123)	(0.0918)	(0.1241)	(0.0996)	(0.0734)	(0.2334)	(0.2207)	(0.1254)
Divested	0.3383	-0.7667	-0.4931	-0.3979**	-0.5123	-0.1430	0.0183	-1.1054*	-0.7083*
	(0.5151)	(0.5855)	(0.3765)	(0.1957)	(0.5001)	(0.3199)	(0.5322)	(0.6022)	(0.4042)
Terminated	-0.1361	-0.3674	-0.2517	0.3513	-0.1733	0.0890	6.3700	5.2879	-0.7340*
	(0.3080)	(0.5584)	(0.3609)	(0.2544)	(0.4504)	(0.2582)	(281.9000)	(202.5000)	(0.3867)
Max. Rescaled R^2	11.78	7.38	51.59	24.67	26.18	50.78	14.45	9.04	50.25

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

Table XII: **Robustness Check**

Linearity Check in Sample 1996-2000

	$\Delta SmallBus < 0$						$\Delta SmallBus > 0$					
Dependent Variable	$\Delta ProblemLoan$	ΔA	$\Delta AdjRoa$	ΔE	$\Delta Tier1$	ΔC	$\Delta ProblemLoan$	ΔA	$\Delta AdjRoa$	ΔE	$\Delta Tier1$	ΔC
ΔSmallBus	0.0017	-0.8014	-0.0027	1.8848*	-0.0553***	0.8370	0.0199***	-0.5986	-0.0166***	-0.2264	-0.0587***	-1.6416**
	(0.0034)	(1.0410)	(0.0044)	(1.0366)	(0.0161)	(1.1644)	(0.0025)	(0.6719)	(0.0029)	(0.6719)	(0.0102)	(0.7691)
SmallBus	0.0183***	-1.6866**	-0.0170***	-1.3383*	-0.0597***	-1.4594*	0.0182***	-1.4119**	-0.0155***	0.7129	-0.0561***	-1.7063***
	(0.0023)	(0.7587)	(0.0031)	(0.7328)	(0.0113)	(0.8376)	(0.0021)	(0.5737)	(0.0025)	(0.5776)	(0.0089)	(0.6537)
ΔFocus	-0.0067***	-0.6220	0.0033	1.0747	0.0348***	-0.8499	-0.0098***	-0.0454	0.0104***	-0.7656	0.0355***	0.2338
	(0.0022)	(0.7108)	(0.0029)	(0.7026)	(0.0106)	(0.8104)	(0.0020)	(0.5345)	(0.0024)	(0.5401)	(0.0082)	(0.6089)
Focus	-0.0083***	0.6929	0.0086***	1.1650**	0.0283***	0.4406	-0.0082***	0.9996**	0.0055***	0.1429	0.0230***	1.2264***
	(0.0016)	(0.5150)	(0.0021)	(0.5073)	(0.0077)	(0.5812)	(0.0015)	(0.4068)	(0.0018)	(0.4113)	(0.0062)	(0.4683)
ΔBranches	0.0466***	2.5877	-0.0853***	-24.9370***	0.1161	-14.3204**	0.0087	-7.2012	-0.1209***	-38.5741***	-0.1233*	-17.1692***
	(0.0164)	(5.5215)	(0.0217)	(5.8443)	(0.0786)	(6.1022)	(0.0155)	(4.4381)	(0.0186)	(4.5595)	(0.0646)	(5.0685)
Branches	0.0085	3.1694	-0.0381***	-9.5348***	-0.0523	-3.7064	0.0056	-6.7776**	-0.0536***	-20.4208***	-0.1743***	-14.2431***
	(0.0102)	(3.6920)	(0.0135)	(3.5897)	(0.0488)	(3.9452)	(0.0099)	(2.7309)	(0.0119)	(2.7917)	(0.0416)	(3.1320)
ΔBhcAsset	0.0003	-0.1903	-0.0021***	-0.1058	-0.0048**	-0.4728***	0.0001	-0.0423	-0.0008*	-0.2718***	0.0005	0.0214
	(0.0004)	(0.1291)	(0.0005)	(0.1253)	(0.0019)	(0.1410)	(0.0004)	(0.1025)	(0.0005)	(0.1042)	(0.0016)	(0.1169)
BhcAsset	-0.0002	0.2771***	0.0003	0.1509**	0.0015	0.3252***	-0.0003	0.1522**	0.0005*	0.2776***	0.0004	0.0459
	(0.0002)	(0.0649)	(0.0003)	(0.0604)	(0.0010)	(0.0691)	(0.0002)	(0.0646)	(0.0003)	(0.0651)	(0.0010)	(0.0729)
Bhc	-0.0006	0.0306	0.0004	0.1677*	-0.0152***	-0.1315	-0.0007	0.1861***	0.0013**	0.0902	-0.0099***	0.1659**
	(0.0006)	(0.0947)	(0.0008)	(0.0938)	(0.0029)	(0.1089)	(0.0005)	(0.0712)	(0.0006)	(0.0724)	(0.0022)	(0.0816)
ΔUnemployment	0.0001	-0.0199	-0.0001	0.0267	0.0016*	0.0186	0.0001	-0.0741	0.0001	0.0000	-0.0001	-0.1075*
	(0.0002)	(0.0644)	(0.0003)	(0.0622)	(0.0010)	(0.0713)	(0.0002)	(0.0479)	(0.0002)	(0.0487)	(0.0007)	(0.0554)
Unemployment	0.0002**	-0.0820***	-0.0002	-0.0468	-0.0002	-0.0723**	0.0001	-0.0940***	-0.0001	-0.0445*	-0.0003	-0.0617**
	(0.0001)	(0.0315)	(0.0001)	(0.0304)	(0.0005)	(0.0353)	(0.0001)	(0.0260)	(0.0001)	(0.0263)	(0.0004)	(0.0300)
ΔPop	-0.0233**	2.5481	0.0344***	6.9044**	-0.1014**	5.7792	0.0046	0.4016	-0.0107	-7.1215***	0.0188	-3.7370
	(0.0093)	(3.0984)	(0.0124)	(3.0631)	(0.0445)	(3.5592)	(0.0087)	(2.3840)	(0.0104)	(2.4232)	(0.0361)	(2.7724)
LogPop	-0.0022**	0.3167	0.0029**	0.5590**	-0.0109***	0.4343	0.0001	0.1174	-0.0013	-0.7423***	0.0000	-0.4196
	(0.0009)	(0.2840)	(0.0012)	(0.2800)	(0.0041)	(0.3270)	(0.0008)	(0.2295)	(0.0010)	(0.2339)	(0.0035)	(0.2670)
LogPop x ΔPop	0.0019**	-0.2420	-0.0028***	-0.5986**	0.0099***	-0.4491	-0.0003	-0.0600	0.0010	0.5863***	-0.0029	0.2879
	(0.0008)	(0.2537)	(0.0010)	(0.2503)	(0.0037)	(0.2933)	(0.0007)	(0.2025)	(0.0009)	(0.2059)	(0.0031)	(0.2357)
Acquired	0.0001	-0.0864	-0.0008	-0.3274***	-0.0057**	-0.1925*	0.0001	0.0051	-0.0009	0.0356	-0.0065***	-0.0059
	(0.0005)	(0.0879)	(0.0007)	(0.0868)	(0.0026)	(0.0983)	(0.0005)	(0.0674)	(0.0006)	(0.0687)	(0.0020)	(0.0771)
Divested	0.0017	-0.7511	-0.0059	-0.8002*	-0.0137	-0.9388*	0.0004	-0.1572	-0.0007	-0.0616	-0.0158	-0.4409
	(0.0033)	(0.4681)	(0.0043)	(0.4702)	(0.0157)	(0.5655)	(0.0025)	(0.3026)	(0.0030)	(0.3101)	(0.0103)	(0.3187)
Terminated	-0.0011	0.2984	-0.0019	-0.1148	-0.0054	-0.3420	0.0009	-0.3546*	-0.0037*	-0.5239**	-0.0282***	-0.4821**
	(0.0025)	(0.4233)	(0.0033)	(0.4172)	(0.0121)	(0.4788)	(0.0016)	(0.2103)	(0.0020)	(0.2104)	(0.0067)	(0.2373)
R^2 or Max. Rescaled R^2	53.05	45.63	46.89	45.79	62.33	53.32	27.76	37.62	27.63	41.74	61.28	39.49

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

Table XIII: **Robustness Check**

New ProblemLoan

Bank Size	**<$150M**			**$150M - $1B**		
Dependent Variable	**AdjRoa**		**Δ AdjRoa**	**AdjRoa**		**Δ AdjRoa**
Year	1996	2000	1996-2000	1996	2000	1996-2000
ΔSmallBus	-	-	-0.0051***	-	-	-0.0068**
	-	-	(0.0017)	-	-	(0.0033)
SmallBus	-0.0038**	0.0036*	-0.0091***	-0.0054**	-0.0062**	-0.0079***
	(0.0018)	(0.0019)	(0.0019)	(0.0023)	(0.0025)	(0.0030)
ΔFocus	-	-	0.0022	-	-	0.0017
	-	-	(0.0018)	-	-	(0.0026)
Focus	0.0051***	0.0038**	0.0009	0.0048***	0.0058***	0.0054***
	(0.0014)	(0.0015)	(0.0014)	(0.0014)	(0.0016)	(0.0017)
ΔBranches	-	-	-0.1095***	-	-	-0.0941***
	-	-	(0.0133)	-	-	(0.0230)
Branches	-0.0340***	-0.0754***	-0.0454***	-0.0318**	-0.0546***	-0.0439**
	(0.0079)	(0.0104)	(0.0086)	(0.0144)	(0.0174)	(0.0175)
ΔBhcAsset	-	-	-0.0013***	-	-	-0.0011**
	-	-	(0.0003)	-	-	(0.0004)
BhcAsset	0.0004***	-0.0001	0.0003	0.0003**	0.0004*	0.0002
	(0.0002)	(0.0002)	(0.0002)	(0.0001)	(0.0002)	(0.0002)
Bhc	0.0019***	0.0015***	0.0008*	0.0013**	0.0008	0.0005
	(0.0004)	(0.0005)	(0.0005)	(0.0006)	(0.0007)	(0.0008)
ΔUnemployment	-	-	0.0000	-	-	-0.0001
	-	-	(0.0002)	-	-	(0.0003)
Unemployment	-0.0002**	-0.0001	-0.0001	-0.0004***	-0.0002**	-0.0001
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
ΔPop	-0.0084	-0.0063	0.0071	-0.0236*	0.0119	0.0297**
	(0.0075)	(0.0085)	(0.0076)	(0.0125)	(0.0111)	(0.0136)
LogPop	-0.0025***	-0.0019**	0.0002	-0.0035***	0.0004	0.0024*
	(0.0007)	(0.0008)	(0.0007)	(0.0011)	(0.0010)	(0.0012)
LogPop x ΔPop	0.0013**	0.0009	-0.0005	0.0022**	-0.0008	-0.0021**
	(0.0006)	(0.0007)	(0.0007)	(0.0010)	(0.0009)	(0.0011)
Age	0.0015***	0.0025***	-0.0004*	0.0008***	-0.0001	-0.0006*
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0003)	(0.0003)
Acquired	-0.0025**	-0.0048***	-0.0011**	-0.0034***	-0.0026**	0.0003
	(0.0010)	(0.0009)	(0.0004)	(0.0012)	(0.0011)	(0.0006)
Divested	-0.0051***	-0.0066	-0.0029	-0.0003	0.0002	0.0013
	(0.0018)	(0.0055)	(0.0025)	(0.0015)	(0.0083)	(0.0027)
Terminated	-0.0021	-0.0065**	-0.0029	-0.0028**	-0.0126***	-0.0021
	(0.0014)	(0.0032)	(0.0018)	(0.0012)	(0.0035)	(0.0018)
R^2	12.58	19.93	34.80	11.56	7.33	31.53

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

Table XIV: **Robustness Check**

Very Small Business Loans of Small Community Banks (<$150 M)

Year	**1996**				**1996-2000**			
Dependent Variable	**E**	**AdjRoa**	**Tier 1**	**C**	**Δ E**	**Δ*AdjRoa***	**Δ*Tier* 1**	**Δ C**
Level1996/Rating1996	-	-	-	-	1.9462***	-0.7260***	-0.4898***	3.0919***
	-	-	-	-	(0.0917)	(0.0208)	(0.0114)	(0.1656)
ΔSmallBus100					1.2979	-0.0323**	-0.3189***	-3.7928
					(2.8825)	(0.0132)	(0.0389)	(3.3821)
SmallBus100	3.8938***	-0.0305***	-0.7025***	-8.0813***	4.9426**	-0.0515***	-0.2011***	-2.4081
	(1.2381)	(0.0068)	(0.0346)	(1.3537)	(2.2509)	(0.0103)	(0.0308)	(2.5880)
ΔSB100Ratio	-	-	-	-	1.0675	0.0058*	0.0620***	0.5708
	-	-	-	-	(0.6655)	(0.0031)	(0.0092)	(0.7741)
SB100Ratio	0.9057***	0.0124***	0.0977***	2.0736***	0.8330	0.0093***	0.0624***	0.8637
	(0.2828)	(0.0017)	(0.0086)	(0.3235)	(0.5330)	(0.0025)	(0.0075)	(0.6171)
ΔFocus	-	-	-	-	0.1121	0.0017	0.0341***	0.2835
	-	-	-	-	(0.6149)	(0.0028)	(0.0082)	(0.7161)
Focus	1.3434***	0.0126***	0.0476***	1.6353***	0.7355	0.0053**	0.0262***	1.2471**
	(0.3045)	(0.0018)	(0.0093)	(0.3314)	(0.4994)	(0.0023)	(0.0067)	(0.5863)
ΔBranches	-	-	-	-	-30.2201***	-0.0848***	0.0091	-12.9378**
	-	-	-	-	(5.4913)	(0.0241)	(0.0713)	(6.2236)
Branches	-12.9076***	-0.0486***	-0.2578***	-11.6107***	-14.3191***	-0.0354**	-0.1631***	-9.2089**
	(1.7391)	(0.0103)	(0.0522)	(1.8854)	(3.3148)	(0.0146)	(0.0433)	(3.7677)
ΔBhcAsset	-	-	-	-	-0.1025	-0.0014***	-0.0043***	-0.1560
	-	-	-	-	(0.1128)	(0.0005)	(0.0016)	(0.1288)
BhcAsset	0.1252***	0.0009***	-0.0024**	0.0238	0.2854***	0.0006*	0.0010	0.2548***
	(0.0343)	(0.0002)	(0.0010)	(0.0363)	(0.0655)	(0.0003)	(0.0009)	(0.0738)
Bhc	0.1539***	0.0026***	-0.0246***	-0.0741	0.0898	0.0002	-0.0127***	-0.0516
	(0.0460)	(0.0006)	(0.0029)	(0.0504)	(0.0804)	(0.0007)	(0.0022)	(0.0938)
ΔPop	-5.0979***	-0.0174*	0.0732	-3.2093*	-1.3112	0.0180	0.0240	-2.5182
	(1.6249)	(0.0099)	(0.0501)	(1.7475)	(2.5668)	(0.0116)	(0.0342)	(3.1120)
LogPop	-0.8186***	-0.0035***	0.0051	-0.3877**	-0.1822	0.0010	0.0013	-0.3258
	(0.1561)	(0.0009)	(0.0048)	(0.1679)	(0.2447)	(0.0011)	(0.0033)	(0.2949)
Msa	0.2156***	0.0017*	0.0034	0.1106	0.0224	0.0007	0.0019	0.0558
	(0.0787)	(0.0010)	(0.0048)	(0.0840)	(0.1187)	(0.0011)	(0.0032)	(0.1362)
Fhlb	-0.0114	0.0013***	-0.0138***	-0.1218***	-0.0422	0.0003	-0.0020	-0.1199*
	(0.0405)	(0.0005)	(0.0025)	(0.0433)	(0.0617)	(0.0006)	(0.0016)	(0.0713)
Frs	-0.1863***	-0.0017**	-0.0015	0.0451	-0.2162**	0.0000	-0.0056**	-0.1735
	(0.0600)	(0.0007)	(0.0038)	(0.0651)	(0.0908)	(0.0008)	(0.0024)	(0.1056)
Age	0.4524***	0.0008***	0.0003	0.1348***	-0.1366*	-0.0005	0.0044***	0.1276
	(0.0413)	(0.0002)	(0.0013)	(0.0433)	(0.0824)	(0.0004)	(0.0011)	(0.0931)
Max. Rescaled R^2 or R^2	20.41	11.69	35.36	16.32	40.91	38.85	65.48	45.26

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

Very Small Business Loans of Large Community Banks ($150 M - $1 B)

Year	**1996**				**1996-2000**			
Dependent Variable	**E**	**AdjRoa**	**Tier 1**	**C**	**Δ E**	**Δ*AdjRoa***	**Δ*Tier* 1**	**Δ C**
Level1996/Rating1996	-	-	-	-	3.1621***	-0.6310***	-0.4191***	3.9017***
	-	-	-	-	(0.2129)	(0.0313)	(0.0223)	(0.3073)
ΔSmallBus100	-	-	-	-	-3.8143	-0.0648***	-0.3091***	-3.5542
	-	-	-	-	(5.8135)	(0.0185)	(0.0780)	(6.3977)
SmallBus100	4.6468*	-0.0369***	-0.8707***	-13.1994***	-5.8706	-0.0593***	-0.1112	-4.1299
	(2.6391)	(0.0110)	(0.0567)	(2.9135)	(5.0061)	(0.0155)	(0.0680)	(5.5532)
ΔSB100Ratio	-	-	-	-	1.9838	0.0097**	0.0261	1.0541
	-	-	-	-	(1.4183)	(0.0046)	(0.0192)	(1.6147)
SB100Ratio	0.9654	0.0150***	0.2144***	4.6035***	2.7190**	0.0072*	0.0195	0.8974
	(0.6976)	(0.0029)	(0.0149)	(0.8004)	(1.2393)	(0.0038)	(0.0168)	(1.3984)
ΔFocus	-	-	-	-	1.4422	0.0048	0.0241*	0.5137
	-	-	-	-	(0.9983)	(0.0032)	(0.0133)	(1.0582)
Focus	1.9086***	0.0084***	0.0643***	1.3398***	1.9739***	0.0077***	0.0206**	1.1085
	(0.4419)	(0.0018)	(0.0095)	(0.4697)	(0.6802)	(0.0021)	(0.0089)	(0.7111)
ΔBranches	-	-	-	-	-38.6754***	-0.1373***	0.6741***	-21.1182*
	-	-	-	-	(10.3290)	(0.0337)	(0.1418)	(11.2019)
Branches	-4.6932	-0.0176	-0.5784***	-9.1145*	-17.5012**	-0.0403*	0.1159	-2.8074
	(4.3866)	(0.0183)	(0.0947)	(4.7327)	(7.3913)	(0.0222)	(0.0942)	(7.9932)
ΔBhcAsset	-	-	-	-	0.0170	-0.0012**	-0.0002	-0.3300*
	-	-	-	-	(0.1688)	(0.0005)	(0.0021)	(0.1751)
BhcAsset	0.1105***	0.0003*	-0.0054***	-0.0071	0.1023	0.0002	0.0027***	0.2332***
	(0.0398)	(0.0002)	(0.0008)	(0.0418)	(0.0756)	(0.0002)	(0.0010)	(0.0836)
Bhc	0.1451*	0.0020***	-0.0164***	-0.0008	0.1239	0.0015	-0.0090**	-0.0575
	(0.0869)	(0.0007)	(0.0038)	(0.0929)	(0.1499)	(0.0009)	(0.0039)	(0.1591)
ΔPop	-11.3879***	-0.0431***	0.0012	-2.9952	3.6631	0.0443***	-0.0979	7.6152
	(3.8626)	(0.0159)	(0.0822)	(4.0899)	(5.3273)	(0.0166)	(0.0696)	(5.6582)
LogPop	-1.1983***	-0.0052***	0.0017	-0.3082	0.3531	0.0036**	-0.0102*	0.7114
	(0.3408)	(0.0014)	(0.0072)	(0.3596)	(0.4729)	(0.0015)	(0.0061)	(0.5060)
Msa	-0.0347	0.0006	-0.0005	0.0395	-0.1083	-0.0007	0.0032	0.0574
	(0.0992)	(0.0008)	(0.0043)	(0.1046)	(0.1457)	(0.0009)	(0.0038)	(0.1539)
Fhlb	-0.1122*	0.0008	-0.0142***	-0.1707**	-0.0184	-0.0009	-0.0078***	-0.2298**
	(0.0636)	(0.0005)	(0.0028)	(0.0675)	(0.0953)	(0.0006)	(0.0025)	(0.1024)
Frs	0.0715	0.0008	0.0010	0.4122***	-0.0488	-0.0010	-0.0026	0.1053
	(0.0831)	(0.0007)	(0.0037)	(0.0932)	(0.1112)	(0.0007)	(0.0029)	(0.1207)
Age	0.4058***	0.0006**	0.0090***	0.3953***	0.1092	-0.0009**	0.0018	0.5268***
	(0.0746)	(0.0003)	(0.0016)	(0.0799)	(0.1339)	(0.0004)	(0.0017)	(0.1444)
Max. Rescaled R^2 or R^2	14.20	11.94	33.73	17.10	49.44	40.34	43.27	47.18

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

Table XV: **Liquidity Effects**

Bank Size	**<$150M**			**$150M - $1B**		
Dependent Variable	**L**		**Δ L**	**L**		**Δ L**
Year	1996	2000	1996-2000	1996	2000	1996-2000
ΔSmallBus	-	-	-1.1300**	-	-	-2.4518*
	-	-	(0.5036)	-	-	(1.2742)
SmallBus	-2.3259***	-4.1408***	-1.0615*	-6.0007***	-3.0528***	-3.6778***
	(0.4546)	(0.4158)	(0.5696)	(0.7893)	(0.7347)	(1.2431)
ΔLoantoDep	-	-	-4.1235***	-	-	-0.5121**
	-	-	(0.3992)	-	-	(0.2363)
LoantoDep	-5.2065***	0.0037	-4.2579***	-0.0527	-2.3920***	-0.5114**
	(0.3165)	(0.0173)	(0.4110)	(0.0514)	(0.3254)	(0.2014)
ΔFocus	-	-	0.3057	-	-	-0.1862
	-	-	(0.5309)	-	-	(0.9618)
Focus	1.1604***	-0.1686	1.3975***	0.8857*	0.9972**	1.1390*
	(0.3295)	(0.3187)	(0.4204)	(0.4624)	(0.4524)	(0.6465)
ΔBranches	-	-	0.8855	-	-	-11.4994
	-	-	(4.0123)	-	-	(10.3191)
Branches	-1.5976	-3.0303	0.2565	6.9387	8.0270	3.8426
	(1.9350)	(2.2228)	(2.6045)	(4.7879)	(5.0954)	(7.2296)
ΔBhcAsset	-	-	-0.1988*	-	-	-0.3641**
	-	-	(0.1015)	-	-	(0.1665)
BhcAsset	0.1275***	0.0537	0.2757***	-0.0008	0.4086***	0.3305***
	(0.0382)	(0.0491)	(0.0623)	(0.0421)	(0.0595)	(0.0817)
Bhc	-0.0138	-0.0787	-0.0497	0.0480	0.0239	0.2868*
	(0.0514)	(0.0587)	(0.0688)	(0.0933)	(0.0932)	(0.1474)
ΔUnemployment	-	-	0.0382	-	-	-0.0251
	-	-	(0.0454)	-	-	(0.1003)
Unemployment	-0.0361**	-0.0314	-0.0371	-0.0621**	-0.0111	0.0183
	(0.0168)	(0.0212)	(0.0250)	(0.0275)	(0.0312)	(0.0467)
ΔPop	-4.4265**	0.3142	0.4165	-2.2430	2.8903	3.9272
	(1.7943)	(1.8084)	(2.2384)	(4.0948)	(3.1388)	(5.1758)
LogPop	-0.4126**	0.0144	0.0037	-0.2883	0.2486	0.3409
	(0.1727)	(0.1719)	(0.2166)	(0.3612)	(0.2858)	(0.4657)
LogPop x ΔPop	0.3198**	-0.0246	-0.0477	0.2781	-0.2661	-0.3405
	(0.1514)	(0.1492)	(0.1913)	(0.3217)	(0.2498)	(0.4135)
Age	0.1103**	0.2105***	0.0680	0.3002***	0.3586***	0.2568**
	(0.0444)	(0.0432)	(0.0716)	(0.0801)	(0.0756)	(0.1306)
BIF	-0.4128	0.5974*	0.4381	1.0848***	0.3581	0.6004
	(0.2900)	(0.3165)	(0.3997)	(0.3588)	(0.3069)	(0.8178)
SAIF	-0.2179*	-0.1046	0.0022	-0.2141**	-0.0679	-0.1636
	(0.1151)	(0.1670)	(0.1536)	(0.0968)	(0.1044)	(0.1284)
Acquired	-0.0623	0.1431	-0.0171	0.1323	-0.2401	-0.0870
	(0.1143)	(0.1002)	(0.0661)	(0.1821)	(0.1565)	(0.1212)
Divested	-0.3827*	-0.4617	-0.6325*	-0.4753*	-1.7812*	-0.7323
	(0.2104)	(0.5935)	(0.3371)	(0.2483)	(1.0278)	(0.5489)
Terminated	-0.1228	0.0701	-0.3915	-0.4828**	-2.7871***	-0.6145
	(0.1728)	(0.3520)	(0.2455)	(0.2024)	(0.6230)	(0.3778)
Max. Rescaled R^2	28.13	20.16	49.17	21.04	28.23	46.23

*** Significant at 1 percent ** Significant at 5 percent * Significant at 10 percent

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