

# **The Impact of Structural Change in the Banking Industry on Small Business Lending**

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by

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## ***Executive Summary***

Unlike large business firms, small business firms rely heavily on commercial banks for external funding. In this regard, small banks are the major purveyors of small business credit. Unfortunately, the number of small banks has been declining considerably due to a consolidation movement in the U.S. banking industry. The implementation of the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 promises to accelerate the pace of structural change as large U.S. banks expand their regional and national franchises.

While there clearly are economic motivations for these structural changes in the banking industry, there is some concern about the implications to small business firms across the country. Will small business credit supplies shrink due to the growth of large, complex banking organizations that reallocate loanable funds to large firms?

The present study, which is funded by the U.S. Small Business Administration (Contract No. SBAHQ-95-C-0025), employs recently available data on bank accounting statements to examine the relationship between bank structure and small business lending. First, the study overviews historical data on this relationship. Second, recent bank mergers and acquisitions are examined for their potential effects on changes in small business lending. Third, and last, results are reported of a national survey of bankers involved in mergers and acquisitions that addresses their experiences concerning the effects of structural change on small business lending practices.

In summary, and consistent with other published research on this subject, the empirical results are mixed. However, the weight of the evidence points to more negative than positive effects of banking industry consolidation on small business lending. Briefly stated, some of the findings of the study are as follows:

- The research hypothesis that small business lending is related to different variables that capture bank structure is tested. With respect to BHCs, holding a number of factors constant in a multivariate context, member banks tended to make more small business loans (SBLs) as a proportion of total assets compared to independent banks. However, holding asset size constant, members of large BHCs tended to have lower SBL ratios than members of small BHCs. Additionally, banks in states previously allowing national entry of MBHCs or allowing statewide MBHCs tended to have lower SBL ratios. Of course, more liberal state laws on bank expansion tend to encourage a greater degree of bank consolidation than in other states. For branch banks the results were similar to those for BHCs in many ways. Branch banks tended to make more SBLs than banks with no branches. However, large branch bank

organizations tended to have lower SBL ratios than small branch bank organizations. And, states allowing statewide branching tended to have lower SBL ratios compared to states with limitations on statewide branching. *Together, these results suggest that the current trend toward large BHCs and large branching organizations likely will have a negative effect on small business credit supplies.* BHCs with greater geographic diversification did tend to have higher ratios of very small business loans (i.e., less than \$100,000) than other banks. Also, young banks tended to have higher very small business loan ratios than older banks. Consequently, to the extent that BHCs develop highly diversified national franchises and de novo banks enter into small business markets under served by large banks, there are some countervailing forces that could mitigate declines in small business credit during the current consolidation movement.

- Samples were gathered of bank targets and buyers in acquisitions in the second half of 1993 and 1994. The main research hypothesis is that changes in small business lending activity before and after acquisition are related to different variables that reflect bank structure. In this regard, there are two competing hypotheses: (1) the size hypothesis contends that target banks benefit from joining a larger aggregate organization, which results in increased credit supplies to bank customers; (2) the siphoning hypothesis argues that the larger aggregate organization will spirit away funds from the smaller target bank or reallocate credit consistent with the objectives of the parent company. Total asset size of the target banks had a significant positive relationship with changes in SBL ratios before and after bank acquisitions — that is, the evidence tended to support the size hypothesis, rather than the siphoning hypothesis. Evidence on whether or not banks that were independents or members of one-bank holding companies before acquisition changed their SBL ratios after being purchased by a larger organization was mixed, such that, *at least in the short run*, no clear inferences on how structural change affects small business lending activity can be made. Finally, analyses of aggregate data for buyers and targets in acquisitions and mergers revealed that, when targets of simpler organizational forms join more complex organizations (i.e., large BHCs and branch banks), there are greater increases in small business lending compared to targets of complex organizations. This short-run evidence again tends to support the size hypothesis, rather than the siphoning hypothesis. *Moreover, intrastate mergers are more beneficial to small business lending than interstate mergers, which can be interpreted to mean that mergers across state lines are not motivated by increasing access to the small business loan market.* Such interstate mergers are more likely motivated by the desire to expand a banking organization's large business loan market.
- Results are reported of a national survey of bankers involved in mergers and acquisitions in the second half of 1993. The main research hypothesis is that small business lending volume and the credit evaluation process are related to mergers and acquisitions. The responses indicated that market share was not been an important motivation for most bank mergers and acquisitions. However, gaining entry into a new market, achieving higher operating efficiency, and profitability were important factors. Many respondents reported an increase in small business loans (less than \$250,000) and medium business loans (\$250,000-\$1 million) due to their mergers or acquisitions. Less than 10 percent of the respondents reported a decrease in their small business loans as a result of a structural change. Also, less than 10

percent of the respondents reported an increase in their large business loans. Four characteristics of the loan applicants seemed to play a very important role in the credit decision process of a relatively large majority of the respondents before and after merger or acquisition: cash flow, financial ratios, collateral, and, most importantly, character of the manager of the borrowing firm. Moreover, results indicated that a greater percentage of the respondents experienced no change in the following factors associated with small business loans: profitability, risk of default, number or dollar value, finance charges, approval rate, time to process loans, and offering of related loans. Interestingly, statistical tests indicated that merger and acquisition tends to increase the objectiveness of the credit decision process and, in turn, diminish the value of bank relationships by small business borrowers. *Thus, while most of the findings suggest that bank mergers and acquisitions do not appear to change the credit decision process for small business loans, some evidence points to increased emphasis on objective criteria, as opposed to subjective relationship factors.*

In general, the weight of the evidence in this study and in studies by other researchers is more negative than positive in terms of the potential effects of banking industry consolidation on small business lending. Apparently, small business firms across the country can expect some difficulties in obtaining bank credit as the banking industry undergoes a period of structural change and resultant adjustments in competitive market conditions. Whether these negative effects are short-run or long-run in nature is not possible to discern from the data at this time. Future research is needed to further examine the effects of on-going consolidation on small business credit over time.

# **The Impact of Structural Change in the Banking Industry on Small Business Lending**

## **I Introduction**

The Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 eliminates long-standing interstate barriers to entry in the banking industry. The Act has two main provisions. First, it allows bank holding companies (BHCs) to acquire banks across state lines without approval by state legislative bodies. Acquired banks must remain independent entities until June 1, 1997 when the acquirer can convert its acquisitions into new branch offices. This provision was effective September 29, 1995. Second, the Act will enable banks to branch across state lines effective June 1, 1997, as long as states do not exercise their option to disallow such branch entry.<sup>1</sup>

It is expected that these provisions will have major effects on the structure of the U.S. banking industry; in particular, the consolidation movement underway in the banking industry over the last decade will accelerate due to both this legislation [see Nolle (1995) for details of this trend] and the likely repeal of the Glass-Steagall Act in the near future.

Because banks are the primary source of external funding for small business firms, regulatory changes in the banking industry might have important implications to their viability. In this regard, small banks typically allocate larger proportions of their assets to small business loans than do large banks [see Peek and Rosengren (1995)]. However, many small independent banks are being acquired by BHCs and either held as an affiliated bank or converted to a branch of an existing bank in the organization via a merger [Calem (1994) for further discussion and

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<sup>1</sup> At the time of this writing, only Texas had opted out of interstate branching rules.

references]. Thus, not only is the consolidation process gradually reducing the number of small banks but it is causing an unprecedented restructuring of the U.S. banking system.

The present study intends to examine empirical evidence on the impact of on-going structural changes in the U.S. banking industry on small business lending. Consistent with the main provisions of the 1994 Act, we focus on BHCs and branch banks. The analyses are divided into three parts: (1) past relationships between these types of bank structures and small business lending are documented, (2) recent impacts of bank acquisitions and mergers on small business lending are investigated, and (3) the results of a survey of bankers involved in mergers and acquisitions are reported concerning their effects on small business lending practices.

We employ Call Report data<sup>2</sup> for the period June 1993 - June 1996 to collect small business lending data for all U.S. banks. These data give the number and dollar amounts of business loans of various sizes; for example, business loans less than \$100,000, less than \$250,000, and less than \$1,000,000. We define business loans as the sum of commercial and industrial loans and commercial real estate loans. Also, while we examine all three loan size ranges in this study, relatively greater emphasis is placed on those business loans less than \$250,000, which we believe best capture small business lending activities (i.e., larger loans may well have been extended to medium-sized and large firms, and smaller loans likely are dominated by very small firms). It is important to note that this proxy for small business lending is in error to the extent that loan size and firm size are unrelated to one another.

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<sup>2</sup> In June 1993 Congress required banks for the first time to include in their Call Reports schedule RC-C entitled "Loans to Small Businesses and Small Farms." Cross-sectional information on different categories of small commercial and industrial and commercial real estate loans for all insured U.S. banks is contained in this schedule.

In the first part of the analyses, comparisons of small business lending activity by independent banks versus banks that are members of BHCs, as well as by branch banks<sup>3</sup> versus unit banks, are made. Both univariate and multivariate analyses are conducted in an effort to assess historical relationships between bank structure and small business lending. Further analyses of geographic expansion of banks and age effects of banks on small business lending are also conducted. These analyses address the issues of how intrastate and interstate expansion affect small business lending and how bank age could affect such lending (i.e., de novo and young banks versus older banks).

In the second part of the analyses, samples of recent bank mergers and acquisitions are examined to determine if such structural changes have impacts on small business lending in subsequent years. A Freedom of Information request to the Board of Governors of the Federal Reserve System provided lists of all U.S. bank mergers and acquisitions in the second half of 1993 (n = 532) and the second half of 1994 (n = 631). These samples are used to compare small business lending before and after structural change (e.g., June 1993 data is compared to June 1995 data, using mergers and acquisitions in the second half of 1993). Multiple regression analyses are used to examine impacts on target banks alone. In addition, we analyzed the impact of structural change on the aggregate banking organization including both buyers and targets combined. In the third part of the analyses, we report the results of a bank survey of managers involved in mergers and acquisitions (see appendix B). Here we obtain bankers' perceptions of the potential effects of bank mergers and acquisitions on the relationships between small

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<sup>3</sup> Information on which banks operated branch offices, the number of offices, and their locations was obtained from the Bank Structure computer tape.



borrowers and bank lenders, the terms of small business credit contracts, and other areas of small business lending not reflected in the credit supply data on the Call Reports.

Appendix A discusses relevant empirical literature on small business lending based on the U.S. experience, as well as evidence from Canada, which has a highly concentrated banking system with widespread branching systems. Section II presents an overview of small business lending in the U.S., as derived from recently available Call Report data. Sections III reports the empirical findings on historical relationships between bank structure and small business lending. Section IV focuses on the effects of recent bank mergers and acquisitions on small business lending. Section V covers the results of the bank survey of how mergers and acquisitions affect small business lending practices. Lastly, section VI gives the summary and conclusions.

## **II. Small Business Lending in the United States: An Overview**

Tables 1-9 utilize the Call Report data to give some perspective on commercial lending to small business firms by all insured U.S. commercial banks. Commercial lending is defined as business loans and commercial real estate loans. Data are shown for four different size ranges of loans: <\$100,000, <\$250,000, <\$1,000,000, and >\$1,000,000. While the size of a loan and the size of the business borrower are not perfectly correlated, Congress approved the collection of this data as a reasonable proxy for business size. Also, it is noteworthy that many small business firms use consumer credit cards for various working capital needs, which would not be included in small business loans as defined here. Despite the fact that there some limitations in using the business loan data on the Call Reports, this data has only been available since 1993 and, therefore, provides the first hard evidence on small business lending by the commercial banking industry in the United States.

Tables 1-3 report the dollar amount of business lending by loan size category for 1994 (n = 10,542 banks), 1995 (n = 9,991 banks), and 1996 (n = 10,542), respectively. We exclude 1993 aggregate data due to errors in this data in the first year of its collection. From 1994 to 1995 a slight increase in SBLs occurred -- for example, loans less than \$250,000 increased from \$155 billion in 1994 to \$164 billion in 1995, a total increase of \$9 billion or about 6 percent. However, a larger increase in loans over \$1,000,000 took place in these two years -- namely, from \$434 billion in 1994 to \$490 billion in 1995, a total increase of \$56 billion or 13 percent. *Thus, large firms account for most of the increases in commercial loans in the banking industry in 1995 relative to 1994*, while small firms experienced slower growth in credit supplies. In 1996 loans less than \$250,000 increased to \$172 billion, or about a 5 percent increase compared to 1995. At the same time loans over \$1,000,000 rose to \$515 billion in 1996, or about a 5 percent increase compared to 1995. These data suggest that *small business credit supplies kept up with large business credit expansion from 1995 to 1996*.

Another pattern that is evident in Tables 1-3 is that bank size and loan size are positively related to one another. *Smaller banks provide most small business credit, and larger banks cater to the credit needs of large firms for the most part*. Banks with less than \$300 million in assets provided over 40 percent of small business loans under \$250,000 in each year. While large banks are most committed to the needs of large business firms, it is interesting to observe that banks with assets over \$20 billion doubled the volumes of their loans less than \$100,000 and less than \$250,000 between 1994 and 1996. This trend indicates *that large banks have become more small business friendly in recent years*.

Tables 4-7 recalculate the data by dividing business loans by the total assets for each bank. Roughly speaking, banks under \$300 million in assets allocate about 10 percent of their assets to SBLs (i.e., business loans less than \$250,000), whereas large banks over \$5 billion in assets devote only 1-3 percent of their assets to such loans. It is clear that smaller banks are much more dependent on their SBL portfolio for their performance than large banks. Comparing the average ratios for all banks from 1994 to 1996, there is little change in SBLs (as a proportion of total assets) across the different bank sizes, with the possible exception of large banks with over \$20 billion in assets that increased loans less than \$250,000 from 1.5 percent of total assets in 1994 to 1.9 percent in 1996.

Tables 7-10 similarly recalculate business loans by dividing small business loans by total business loans. Here we can see that smaller banks commit the lion's share of their business credit to small firms -- for example, banks with less than \$300 million in assets typically devoted on average more than 50 percent of their business credit to SBLs under \$250,000. This percentage exceeds 70 percent for the smallest banks with less than \$100 million in assets. By contrast, banks with more than \$20 billion in assets tended to devote less than 8 percent of their business credit to such loans compared to less than 23 percent for banks with \$5-\$20 billion in assets.<sup>4</sup> The percentage of small business loans less than \$250,000 to total business loans increased noticeably for both of these large size categories of banks from 1994 to 1996.

*These trends suggest that banks increased their large business lending more rapidly than small business lending from 1994 to 1996; however, large banks have been increasing their exposure to small business lending in recent years. Are these trends in the growth of commercial*

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<sup>4</sup> The small sample size for very large banks with more than \$20 billion in total assets requires caution in interpreting trends in this data.

credit among large and small firms related to the structural change in the banking industry? This question is central to the purpose of the present study. Forthcoming sections will examine different aspects of potential bank structure effects on small business lending, including bank holding companies, branch banking, state regulations, and mergers and acquisitions.

### **III. Historical Relationships Between Small Business Lending and Bank Structure**

In this and forthcoming sections we use univariate and multivariate research methods to examine the relationship between small business lending and different structural forms in commercial banking. Univariate tests are simple comparisons of mean differences between two different forms of banking organization. These tests are straightforward but suffer the potential drawback of not controlling for the effects of other variables on small business lending. Consequently, our primary emphasis is on multivariate analyses using ordinary least squares (OLS) regression models of the form:  $Y = b_0 + b_1 X_1 + b_2 X_2 + \dots + b_n X_n$ , where Y is the dependent variable (i.e., small business lending),  $X_i$  ( $i = 1, \dots, n$ ) are the independent variables (i.e., bank structure variables plus control variables that account for other potential factors that may influence small business lending), and the coefficients  $b_i$  ( $i = 1, \dots, n$ ) indicate the relationship between each independent variable and small business lending. The signs of the coefficients provide information on the directional relationship between independent variables and small business lending; moreover, statistical tests of each coefficient are performed in order to determine whether or not the associated independent variable has an important effect on small business lending. Together, our univariate and multivariate analyses are designed to enable insights into the association between small business lending and the bank structure variables.

In this section we test the research hypothesis that small business lending is related to different variables that reflect bank structure. More specifically, we employ historical data to compare the volume of small business lending by different structural types of banks, including bank holding companies, independent banks, branch banks, and unit banks.

### ***Bank Holding Company Effects***

Bank holding companies (BHCs) are conglomerate financial entities that own at least one bank in their organization. Most banks in the U.S. are affiliated with a BHC; however, about 25 percent of the banking population remains independent. Thus, it is common to find both independent and affiliated small banks in the banking industry, which provides a particularly relevant comparison of how bank structure may affect SBL activity.

Tables 10-12 compare SBLs less than \$250,000 for affiliated versus independent banks of different asset sizes in rural and urban regions for 1993, 1994, and 1995, respectively. Banks in urban regions have a Standard Metropolitan Area (SMA) code on the Call Report tapes, while banks in rural regions have a county code but no SMA code. Panel A of each table gives the dollar amount of SBLs and panel B shows its percent of total assets. Table 13 reports t tests of mean differences in the SBL ratios. A positive sign on the t statistic indicates that affiliated banks had higher ratios than independent banks, and vice versa for a negative sign. For banks less than \$100 million in assets, affiliated banks made significantly more (less) SBLs than independent banks in rural (urban) regions. For banks with \$100 to \$300 million in assets, affiliated banks made significantly more SBLs than independent banks in rural regions (and there was no difference in urban regions but the sign is negative as before). Since these results are mixed, we

interpret them to mean that affiliation with a BHC does not necessarily alter the small business lending practices of individual banks.

Table 14 gives multiple regression results for the ratio of SBLs to total assets as a function of a holding company dummy variable equal to 1 (affiliated) and 0 (independent). Total assets and the ratio of total loans to total assets are included in the model to adjust for size and lending differences between banks. For loans less than \$100,000 affiliated banks had significantly higher SBL ratios than independent banks in all three years. Similar but less consistently significant results are obtained for loans less than \$250,000, loans between \$100,000 and \$250,000, and loans between \$250,000 and \$1,000,000. Contrary to these findings, affiliated banks had significantly lower SBL ratios than independent banks for loans less than \$1,000,000. However, in the more than \$1,000,000 loan category there are no significant differences.

Table 15 shows the same regression model as in Table 14 but includes an independent variable (i.e., State) to adjust for differences in the demand for SBLs. State represents the number of employees in firms with different ranges of numbers of employees in a particular state. Based on the assumption that the number of employees is related to firm and loan size, we used alternative definitions of State for each of the business loan size categories under study in the regression models:

<u>Business loans</u>	<u>Number of employees</u>
<\$100,000	<20
<\$250,000	<99
<\$1,000,000	<499
≥\$1,000,000	≥500
\$100,000 - \$250,000	20-99
\$250,000 - \$1,000,000	100-499.

With the inclusion of this variable, the holding company dummy variable was only significant for loans less than \$100,000 and loans less than \$250,000. In both cases affiliated banks tended to make more SBLs as a proportion of total assets than independent banks, holding the other independent variables constant. The differences were significant in all three years under study, which suggests that *continued structural change toward BHC affiliation (e.g., 3,028 independent banks in 1993 compared with 2,470 such banks in 1995) does not necessarily imply that small business credit availability from the banking sector will decline over time.*<sup>5</sup>

Another aspect of BHC structural change is the formation of large BHCs with numerous banks spread out over a wide geographic area. Tables 16 -18 contain comparisons of small business lending by banks that are affiliated with small BHCs with less than \$1 billion in aggregate assets versus banks that are affiliated with large BHCs with more than \$1 billion in assets in 1993, 1994, and 1995, respectively. Table 19 provides t tests for mean differences in the ratio of SBLs less than \$250,000 to total assets in urban and rural regions. Most of the t statistics are significant and negative in sign, which means that banks in small BHCs tend to make more SBLs than similarly sized banks in large BHCs. *These results imply that the on-going formation of large BHCs in the U.S. may tend to decrease small business lending in the years ahead, all else the same.*

### ***Branch Banking Effects***

Banks can operate branch offices that are extensions of their main office to the extent allowed by laws in their resident state. The new interstate banking law permits for the first time branching across state lines effective June 1, 1997, with the exception of Texas, which has opted

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<sup>5</sup> We also re-ran the models in Tables 14 and 15 using the aggregate bank holding company as a single observation to compare with independent banks. Because the results were similar, the results are omitted in order to conserve space.

out of this provision. Branching is recognized as perhaps the most invasive form of structural change in the sense that banks can enter new markets at low cost relative to purchasing or starting a bank via a bank holding company. A long-held fear is that banks will use their branch offices to siphon off community deposits, which are upstreamed to a big city bank for allocation to loans and securities there.

Tables 20-22 report SBL activities of branch banks versus unit banks (with no branches) in 1993, 1994, and 1995, respectively. Table 23 shows the t tests for mean differences in the ratio of loans less than \$250,000 to total assets between branch and unit banks in urban and rural regions. For banks less than \$100 million in assets, branch banks tended to make fewer (more) SBLs than unit banks in urban (rural) regions. These results are similar to those in Table 13 comparing affiliated and independent banks. Branch banks with assets between \$300 million and \$1 billion had higher SBL ratios than similarly sized unit banks.<sup>6</sup> Because the results are mixed with no clear trend, *we infer that branch banking does not necessarily affect small business lending activity.*

Tables 24 and 25 display multiple regression results that are similar to Tables 14 and 15, except that the holding company dummy variable has been replaced by a branch banking dummy variable that is 1 if the bank has branches and 0 if it is a unit bank. Referring to Table 24, for loan size ranges less than \$100,000 and in the range \$100,000-\$250,000, the branch variable is positive in sign and highly significant (i.e., in all years at the 1 percent level). *These results suggest that branch banks tend to make more small business loans less than \$250,000 than banks with no branches.* For larger loan sizes in the range \$250,000-\$1,000,000 and more than

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<sup>6</sup>It is possible that this result is explained by the fact that the branch bank will have a number of small offices that are more oriented to small business than a single, larger unit bank office.



\$1,000,000, the branch variable has a positive sign in 1993 but a negative sign in the 1994 and 1995 results. Thus, the effect of branching on these size ranges of business loans is mixed. Table 25 reports the results after adding the demand variable state employees to the regression model, but the results are unchanged for the most part.

### *Joints Effects of Bank Holding Companies and Branch Banks*

In this section we consider the joint effects of bank holding companies and branch banking on small business lending. Today most banks not only belong to a holding company but use branch offices to deliver financial services.

Tables 26-28 report the mean small business lending activity of branch banks that are affiliated with a BHC versus those that are independents. There were about four times more BHC branch banks than independent branch banks. Nonetheless, with over 1,000 independent branch banks in all three years, there are more than adequate sample sizes for the statistical t tests of mean differences in small business lending shown in Table 29. The results of t tests are similar to those for all banks in Table 13 -- i.e., small branch banks under \$300 million in assets that were affiliated with a BHC tended to make more (less) SBLs as a proportion of total assets than independent banks in rural (urban) regions. Many of these t statistics are not significant and, when significant, the level of significance does not exceed the 10 percent level. Again, there is no clear evidence of a structural effect on small business lending.

Tables 30-32 compare SBLs in states with three different categories of state branching restrictions: (1) no statewide branching allowed,<sup>7</sup> (2) recent statewide branching allowed (i.e.,

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<sup>7</sup> States that forbid statewide branching as of June 1993 are: Arkansas, Colorado, Georgia, Iowa, Kentucky, Minnesota, Mississippi, Montana, Nebraska, New York, North Dakota, Oklahoma, and Wyoming.

after 1980),<sup>8</sup> and (3) past statewide branching allowed (i.e., prior to 1980).<sup>9</sup> The underlying rationale here is to compare the effects of state regulations on small business lending. Table 30 contains t tests for mean SBL differences between these three groupings of states. For banks with less than \$100 million in assets, the t statistics are negative in sign and highly significant (at the 1 percent level) in all but one out of nine cases. In general, these results imply that *small banks with less than \$100 million in assets that have the ability to branch statewide tend to make more SBLs than otherwise*. The results for larger sizes of banks are mixed, such that no clear relationship between small business lending and state branching regulations is discernible.

Tables 33-35 similarly compare small business lending in states with four different categories of state multibank holding company (MBHCs) restrictions: (1) no national entry by MBHCs allowed, (2) national entry by MBHCs allowed (as of June 1993),<sup>10</sup> (3) no statewide MBHCs allowed,<sup>11</sup> and (4) statewide MBHCs allowed (as of June 1993). The last two columns of these tables show the t statistics for mean differences in categories (1) versus (2) and (3) versus (4). The results for entry restrictions indicate that, *in states with national entry allowed, banks had lower SBL ratios, which was particularly significant for banks under \$300 million in assets*. On the other hand, *the results for statewide MBHCs rules are mixed, with the exception of very small banks less than \$100 million in assets, which had higher SBL ratios in states with*

<sup>8</sup> State that adopted statewide branching after 1980 are: Alabama, Illinois, Indiana, Kansas, Missouri, New Mexico, Pennsylvania, Tennessee, Connecticut, Florida, Hawaii, Louisiana, Massachusetts, Michigan, New Hampshire, New Jersey, Ohio, Oregon, Texas, Utah, Virginia, Washington, West Virginia, and Wisconsin.

<sup>9</sup> States that had adopted statewide branching before 1980 are: Alaska, Arizona, California, Delaware, District of Columbia, Idaho, Maryland, Nevada, North Carolina, Rhode Island, South Carolina, South Dakota, Maine, and Vermont.

<sup>10</sup> States with national entry by interstate MBHCs allowed (as of June 1993) are: Alabama, Arkansas, Florida, Georgia, Hawaii, Iowa, Kansas, Maryland, Minnesota, Mississippi, Missouri, Montana, North Carolina, Oklahoma, South Carolina, Virginia, and Wisconsin.

<sup>11</sup> States that forbid statewide MBHCs (as of June 1993) are: Arkansas, Georgia, Iowa, Kansas, Louisiana, Mississippi, Missouri, Nebraska, New Hampshire, Oklahoma, Rhode Island, Tennessee, Texas, and West Virginia.

*statewide MBHCs. This latter result is consistent with the statewide branch banking results in Tables 30-32.*

Table 36 reports multivariate regression results using dummy variables for the aforementioned state geographic regulations: (1) national entry by MBHCs allowed or not, (2) statewide expansion by MBHCs allowed or not, and (3) statewide branching allowed or not. Table 37 reports the results for a similar regression equation with state employees (i.e., State) added as a demand variable for each state. These regressions attempt to test the effect of state regulation on small business lending, holding constant the other state geographic regulations as well as asset size and the loan/asset ratio. The results in both tables are very similar, with adjusted  $R^2$  values fairly strong in the range of 40-60 percent. Except for loans over \$1 million, the national entry dummy variable consistently has a negative sign and frequently is significant, which confirms the earlier univariate t tests that found higher small business lending in states that did not allow national entry by MBHCs. The results for the MBHC dummy variable follow the same pattern of signs and is significant many times. *States that allowed statewide MBHCs tended to have lower small business lending than states that forbid such expansion -- a result that is contrary to the univariate tests. Again contrary to the univariate tests, the branch dummy variable results indicate that states with statewide branching restrictions had lower SBL ratios than states that did not allow statewide branching. In sum, the multivariate results suggest that small business lending is diminished in states with more liberal geographic powers, which is the opposite of the results from the univariate tests.*

Table 38 reports the results of regressing SBL ratios on dummy variables for holding company member versus independent banks and large branch organizations (more than five

branch offices) versus small branch organizations (less than or equal to five branches), as well as asset size, the loan/asset ratio, and state employees. For SBLs less than \$100,000, banks that are members of holding companies tended to have significantly higher small business lending than independent banks, but this trend was not evident in other size groupings of loans. By contrast, the branch dummy variable was highly significant for all loan size categories. For loans less than \$250,000 the sign of the branch regression coefficient is negative, which implies that *small branch organizations had higher small business loan ratios than large branch organizations*. For business loans over \$250,000 the branch dummy is positive in sign and suggests that *large branch organizations made more large loans than small branch organizations*.

#### ***Geographic Diversification and Bank Age Effects***

In this section regression results concerning the effects of bank holding company (BHC) geographic expansion and age on small business lending are discussed. Geographic diversification for each BHC is defined as follows:

$$\text{HHI}(1/\text{number of states})(1/\text{number of regions}), \quad (1)$$

where HHI = the Herfindahl index for a BHC (i.e., the sum of the squared ratios of the total assets of the *i*th bank in the BHC divided by the aggregate total assets of all banks in the BHC), and HHI is multiplied by the inverse of the number of states in which the BHC owns and operates banks, as well as the number of regions in the U.S. that it has member banks (i.e., northeast, midwest, south, and west)<sup>12</sup>. While HHI measures the concentration of assets within a BHC

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<sup>12</sup> The regions contain the following states: northeast (Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, New York, and Pennsylvania), midwest (Ohio, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas), south (Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas), and west (Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii).

organization, our modified HHI is a proxy for geographic diversification. For example, we include this measure in a multiple regression model with total assets held constant, such that, for two BHCs with equal asset size, HHI decreases as a BHC increases the number of banks and, therefore, locations in which it operates. Of course, if two equally-sized BHCs had equal HHIs and numbers of banks, but one BHC operated in more than one state and the other BHC only operated in one state, HHI alone would not capture the difference in geographic diversification. To account for this potential problem, we divide HHI by the number of states and regions in which the BHC operates banks. Thus, the smaller our metric as defined in equation (1), the greater the extent of geographic diversification by the BHC.

Our research hypothesis is that geographically diversified BHCs make more small business loans than other BHCs. More specifically, because small business loan risk is greatly affected by local economic conditions, geographic diversification tends to diminish local risk and thereby encourage BHCs to increase small business lending.

The other variable of interest here is age, defined as the number of years that the bank has been in operation, as measured by its establishment date. A popular notion is that, as banking consolidation occurs, *de novo* banks (or, more generally, young banks) will enter the market to meet small business customer needs that are not serviced by large banking organizations. Thus, it is hypothesized that age is negatively related to small business lending activity.

Table 39 shows the results of regressions of small business loan ratios for individual banks as a function of geographic diversification and age, holding constant total assets and total loans/total assets ratios. For small loans less than \$100,000, the negative and significant coefficients on the geographic diversification variable imply that more diversified BHCs make

more small business loans. However, the opposite result is found for the larger loan size ranges; that is, BHCs with more geographic diversification tended to make fewer small business loans with sizes exceeding \$100,000. Thus, *at least for small loans less than \$100,000, this evidence is consistent with the research hypothesis that geographic expansion of BHCs lowers their total credit risk and enables them to expand small business lending.* These small business lending patterns could be due to the use of geographic expansion as a retail, as opposed to wholesale, combat strategy by banking organizations.

As shown in Table 39, in all three years age is negatively related to loans less than \$100,000 but positively associated with higher loan sizes, a pattern that is similar to the geographic diversification variable. These results are consistent with the notion that *young banks niche the market themselves to attract small business customers, who are not being adequately serviced by large banks.* However, we must be careful to point out that this relationship holds only for very small business loans and does not apply to other small business loan sizes. *For small business loans over \$100,000 older banks were more active lenders than younger banks.* It is likely that young banks develop lending relationships with very small business firms and over an extended period of time the firm and the bank grow together. This evidence is consistent with the notion that small business lending is founded on relationships between borrower and lender. Interestingly, while demand-side relationships by borrowers are important to their growth and prosperity over time, supply-side relationships from the standpoint of small banks are similarly important.

#### **IV. Bank Acquisition and Merger Effects**

##### ***Samples and Data***

The main research hypothesis in this section is that changes in small business lending activity before and after acquisition are related to different variables that reflect bank structure. A common concern in the consolidation movement is that large organizations with national and regional interests will spirit away funds from the local borrowers of acquired banks to meet the objectives of the parent company. However, it is possible that target banks will reap risk diversification and scale economies in banking services from the larger aggregate organization and, in turn, credit supplies to local customers will increase. We will refer to the former argument as the *siphoning hypothesis* and the latter as the *size hypothesis*.

To conduct an empirical test of these competing hypotheses, information on all bank acquisitions and mergers in the U.S. in the period 1991-1994<sup>13</sup> were obtained from a Freedom of Information request to the Federal Reserve Board of Governors. Call report data on small business loans and other accounting information for these banks were collected yearly from June 1993 to June 1996. Unfortunately, post-merger Call Report data for targets of merged banks is not available, as the target and buyer become a single entity for reporting purposes. For this reason, at least in the case of mergers, the forthcoming analyses aggregate the data of the buyer and target before the merger and comparisons are made to the consolidated buyer entity after the merger. To compare pre- versus post-consolidation results, because Call Report data on small business lending is only available at mid-year, we focus on two samples of bank acquisitions: (1) banks merged or acquired in the last half of 1993, and (2) banks merged or acquired in the last half of 1994. The first (second) sample enables measurement of changes in small business lending

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<sup>13</sup> Data on acquisitions and mergers in 1990 and 1995 were not complete when this request was made in fall 1995.

just prior to consolidation in June 1993 (June 1994) to later data collected in June 1995 and June 1996. A breakdown of sample buyer and target banks that could be located on the Call Reports by asset size and types of banks is as follows:

	1993		1993		1994		1994	
	Acquisitions		Mergers		Acquisitions		Mergers	
	Buyers	Targets	Buyers	Targets	Buyers	Targets	Buyers	Targets
<b>A. Bank Asset Size</b>								
<\$100 million	25	238	171	168	15	251	174	194
\$100-\$300 million	31	56	90	49	39	58	98	60
\$300 mil.-\$1 billion	32	19	59	25	41	21	75	60
\$1-\$5 billion	26	7	71	14	38	4	74	13
\$5-\$20 billion	36	1	44	0	27	1	46	1
>\$20 billion	35	0	10	0	38	1	13	0
Totals	185	321	445	256	198	336	480	294
<b>B. Bank Structure</b>								
Independent	0	112	97	39	0	134	100	58
OBHC	11	209	209	217	8	202	348	236
MBHC	174	0	0	0	190	0	32	0
Totals	185	321	445	256	198	326	480	294

In 1993 (1994) there are a total of 577 (630) target banks and 630 (678) buyer banks (i.e., some buyers were not banks and other buyers that were banks are counted more than once if they were involved in more than one merger or acquisition).<sup>14</sup> Notice that the distribution of buyers in acquisitions spans all of the asset size classes fairly evenly and is dominated by MBHCs, but for buyers in mergers the size distribution is skewed toward small banks that are OBHCs. By contrast, targets are dominated by small banks, and most of these are OBHCs, many others are independent banks, and none of the targets are members of MBHCs. These data suggest that the consolidation process for acquisitions differs from that of mergers in that larger buyers tend to be

<sup>14</sup> In total there were 645 (731) mergers and acquisitions in the second half of 1993 (1994) according to the information provided to us under the Freedom of Information Request by the Board of Governors of the Federal Reserve System. Hence, we were able to find most of the banks involved in mergers and acquisitions on the Call Reports.



involved in the former and smaller buyers in the latter, with small banks being the primary targets of consolidation. Finally, we should comment that in forthcoming analyses the sample sizes for bank mergers and acquisitions vary due to the availability of data for individual banks on the Call Reports in different years.

Tables 40 and 41 provide t tests for mean changes in the ratio of SBLs less than \$250,000/total assets for the aforementioned samples of acquired (rather than merged) banks. Table 40 shows that the SBL ratio decreased by 0.64 percent between June 1993 and June 1995 for very small banks with less than \$100 million in assets acquired in the second half of 1993 but this decrease was not significant. For small banks in the \$100-\$300 million asset range, the small business lending ratio increased by 2.57 percent, which was highly significant at the 1 percent level. According to the intra-year t tests in Table 40, most of this increase occurred in the first year after the acquisition. Table 41 finds a similar post-acquisition small business lending behavior for banks acquired in the second half of 1994. However, now a significant decrease in small business lending is found for banks under \$100 million in assets, and the increase in such lending for banks in the \$100-\$300 million in assets is not significant.

It is possible that the bank acquisition findings in Tables 40 and 41 are due to general trends in small business lending for very small and small banks. To abstract from merger and acquisition effects on small business lending, a sample of banks with no merger or acquisition activity (i.e., neither targets or buyers) in the 1990-1994 period was collected. Table 42 reports changes in their small business lending over time. Here we see that very small (small) banks had a significant increase (significant increase) of small business lending in the June 1993 to June 1994 period but a significant decrease (insignificant increase) in the June 1994 to June 1995 period.

*Because these patterns of small business lending behavior mimic the acquired banks for the most part, it is not possible to draw any inferences concerning how bank acquisitions generally affect the small business lending behavior of banks under \$300 million.*

Forthcoming analyses further investigate the potential effects of bank mergers and acquisitions on small business lending by using a multivariate regression approach, which attempts to control for a variety of factors that could influence this relationship.

### ***Targets of Bank Acquisitions***

Tables 43-46 provide regression analyses of the determinants of changes in the ratio of SBLs to total assets among targets in bank acquisitions. In Tables 43 and 44 changes in this ratio from June 1993 to June 1995 and to June 1996, respectively, are related to a number of variables concerning targets and buyers, respectively, in the last half of 1993.<sup>15</sup> All continuous variables are log transformed so that their coefficients represent elasticities. Separate regression runs are made for three different sizes of SBLs: (A) less than \$100,000, (B) less than \$250,000, and (C) less than \$1,000,000. The independent variables are:

SBL/TA=small business loans/total assets

NI/TA = net income after taxes/total assets of the target,

Loss/TA = net loans losses after charge-offs/total loans of the target,

EQ/TA = total equity capital/total assets of the target,

TA = total assets of the target,

TA = total assets of the buyer,

HC = dummy variable defined as 1 if the target bank is a member of a holding company and 0 otherwise,

MBHC = dummy variable defined as 1 if the target bank is a member of multibank holding company and 0 otherwise,

State = dummy variable defined as 1 for intrastate structural changes and 0 for interstate consolidations.

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<sup>15</sup>Most of the target banks are relatively small in size. For example, in the 1993 to 1995 (1996) run only 7 (6) banks had more than \$300 million in assets. We ran the regression models excluding banks over \$300 million in assets but the results changed little (if at all).

For acquisitions in the second half of 1993 ( $n = 123$ ), as shown in Table 43, the small business loan/total assets ratio and total assets size of targets were the only significant variables; in other words, after being acquired, targets' small business lending increased more rapidly among those targets with lower SBL ratios and smaller asset sizes than other targets, holding the other independent variables constant. Notice that the asset size of the buyer did not affect changes in small business lending -- that is, large buyers did not necessarily have a negative effect on changes in SBL ratios. All of the overall F statistics are significant at the 1 percent level and the adjusted  $R^2$  values range from 30 to 41 percent. Thus, targets' small business lending and total asset variables explain a considerable amount of the changes in small business lending by targets in their post-acquisition years. Because the estimated coefficient for total assets of targets is negative, which implies that smaller targets experienced the highest rate of increases in small business lending in post-acquisition years, *the evidence tends to support the size hypothesis, rather than the siphoning hypothesis -- that is, as organizations grow through acquisitions, smaller acquired banks' lending behavior with respect to small business firms does not become similar to larger banks.*

It is noteworthy that most of the bank structure dummy variables (i.e., HC, MBHC, and State) are insignificant in Table 43, with the exception of the State dummy in panel C concerning changes in business loans less than \$1 million. In this latter case targets involved in interstate acquisitions had larger increases in such business loans than targets of intrastate acquisitions. These results suggest that interstate acquisitions tend to expand lending to medium- and large-sized firms by target banks. Importantly, the *lack* of significance for the HC and MBHC dummy variables suggests that target banks that were independents or members of one-bank holding

companies did not experience significant changes in their small business lending due to their acquisition. Thus, changes in organizational structure did not adversely affect small business lending activity.

Table 44 provides the results for changes in SBL activity between mid-year 1993 and mid-year 1996. The results are the same for the most part, with the exceptions that the total assets of the target was not significant for business loans less than \$100,000 and that the total assets of the buyer was significant for all three loan sizes. We infer from the negative sign of the coefficient for the total assets of the buyer that SBL activity increased at a faster rate in target banks acquired by smaller buyers than those acquired by larger buyers.

Tables 45 reports the results for targets of acquisitions in the second half of 1994 ( $n = 164$ ), where changes in small business lending are measured from mid-year 1994 to mid-year 1995. In these regression runs the small business loan/total assets ratio is the only consistently significant independent variable. The holding company dummy variable (HC) was significant at the 10 percent level for very small business loans under \$100,000, and the positive sign implies that targets that were members of holding companies (independent banks) had larger (smaller) increases in small business lending after their acquisition than other banks, holding other variables constant. This evidence is not conclusive, but contrary to the results in Tables 43 and 44, the implication is that organizational structure can affect small business lending activity. Thus, *there is weak evidence that independent banks that are targets of acquisitions have smaller increases in their small business lending in post-acquisition years relative to target banks that were members of bank holding companies prior to their acquisition.*

Table 46 extends the results for Table 45 to changes in SBL activity between mid-year 1994 and mid-year 1996. The pattern of variable significance is similar to Table 45, with the exception that State is now significant for business loans less than \$250,000 and less than \$1 million. In both cases the State variable has a positive sign, which means that intrastate targets had larger increases in SBLs than interstate targets in the years after their acquisition.

#### *Aggregate Merger and Acquisition Effects*

One shortfall of the present analyses is the lack of empirical evidence on the effects of mergers. Banks that are targets of mergers are absorbed into the buyer as a branch office. Because no data is available for the target after an acquisition, we consolidated the data for the buyer and target before and after the merger to investigate its influence on aggregate small business lending activity. Aggregate data are also collected for the targets and buyers in acquisitions.

Tables 47 to 52 show the results for the aggregated data of buyers and targets of mergers and acquisitions, acquisitions, and mergers in the last half of 1993. The dependent variable is the change in the ratio of small business lending to total assets from June 1993 to June 1995 or to June 1996, and the independent variables are the same as in Tables 43 to 46, except that the financial ratios and total assets variables are calculated using aggregate buyer plus target data. For mergers and acquisitions combined ( $n = 540$ ), Tables 47 and 48 show that the small business loan/total assets ratio and aggregated total assets are consistently significant at the 1 percent level (i.e., lower aggregate loan ratios and asset sizes had larger increases in their small business lending). The net income/total assets ratio was significant in most of the business loan size runs, with the negative sign indicating that banks with lower profit rates tended to have larger increases

in SBLs after the organizational change. Also, the net loan losses/total loans ratio was negative in sign and significant in two out of three runs shown in Table 48, implying that low loan losses tended to be associated with larger increases in SBLs after re-organization. The holding company (HC) and multibank holding company (MBHC) dummy variables were both negative in sign and significant in some cases in Tables 47 and 48, implying that organizations in which the target was an independent bank or a one-bank holding company had larger increases in their small business loan ratios after merger and acquisitions than targets that were members of more complex MBHC organizations. Finally, contrary to the results mentioned above for targets of bank acquisitions, the State variable in Table 48 has a negative, significant sign, which suggests that interstate mergers and acquisitions had larger increases in SBL activity than intrastate deals.

Tables 49 and 50 give the aggregate buyer and target results for acquisitions only in the second half of 1993 (n = 310). The results are similar to those in Table 43 and 44 for targets of bank acquisitions, with the exceptions that the total assets of the buyer and the State variable are not significant and that the MBHC is significant (at the 10 percent level) and negative in sign for business loans less than \$1 million as in Tables 47 and 48 for mergers and acquisitions combined.

Likewise, Table 51 and 52 reports the aggregate results for mergers only (n = 230) in the second half of 1993. Here we see that equity capital/total assets has a positive sign and is significant in all regression results; hence, SBL activity grew more rapidly in merged organizations that had higher equity ratios. HC is highly significant (at the 5 percent level or higher) and negative in sign in all three regressions in Table 51 but less significant in Table 52, and MBHC is significant and negative in sign for business loans over \$1 million in Table 51 but not significant in Table 52. Thus, mergers involving targets that were independent banks or members

of one-bank holding companies had larger increases in their small business lending ratios in the years immediately following the merger than in the case of targets that were members of MBHCs. Additionally, the state dummy variable is significant and negative in sign in all three regressions in Table 51 and two out of three regressions in Table 52, which means that organizations involved in intrastate mergers had larger increases in their small business loan ratios than those in interstate mergers.

*In sum, the results from the aggregated data for buyers and targets of mergers and acquisitions suggest that, when targets of simpler organizational forms join more complex organizations, there are greater increases in small business lending compared to targets of complex organizations. This evidence tends to support the size hypothesis, rather than the phoning hypothesis. Moreover, intrastate mergers and acquisitions tend to be more beneficial to small business lending than interstate deals, which can be interpreted to mean that mergers across state lines are not motivated by increasing access to the small business loan market. Much interstate structural changes are more likely motivated by the desire to expand a banking organization's large business loan market, as the number of large business firms in a state is limited and many large firms have operations across state lines.*

Tables 53 to 58 report the regression results for mergers and acquisitions in the second half of 1994. Changes in small business lending for the aggregate organization from June 1994 to June 1995 or June 1996 are used as the dependent variable. In general, the results are comparable to the results for organizational changes in the second half of 1993. However, none of the HC dummy variables is significant, and the results for the MBHC dummy variable are mixed, with significant negative coefficients in Tables 53, 54, 57, and 58 (as in the second half 1993 sample)

but significant positive coefficients in Tables 55 and 56 for bank acquisitions. Also, the state dummy variable is significant in some regression runs but the signs are mixed, such that the effect of intrastate and interstate mergers and acquisitions on SBL activity is not clear from this evidence. Because less than one year has lapsed since the time of the organizational change, this data may well be insufficient to accurately assess the effects on small business lending of the mergers and acquisitions. Nonetheless, we interpret the implications of the empirical evidence to be consistent with those based on the second half 1993 sample in most respects.

## V. Bank Survey of Bank Mergers and Acquisitions

We conducted a survey about the effects of bank mergers and acquisitions on small business lending in the United States in November 1996. The survey was sent to the president's office of all U.S. banks involved in mergers or acquisitions in the last six months of 1993 (i.e., a total of 645 mergers and acquisitions yielded a total of 1,147 bank addresses<sup>16</sup> on the Call Reports). A follow-up survey was sent in December 1996. A total of 189 banks (17.2 percent) responded to the survey. Some respondents left a few of the questions unanswered. The survey instrument is shown in appendix B. The main research hypothesis addressed by the survey is that small business lending volume and the credit evaluation process are related to mergers and acquisitions

The banks in the survey are divided into four separate groups: buyers in bank acquisitions (n=41), targets in bank acquisitions (n=60), buyers in bank mergers (n=51), and targets in bank mergers (n=37). We distinguished between bank mergers and acquisitions so that we could

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<sup>16</sup> The sample breakdown is 294 targets of mergers, 240 buyers in mergers, 339 targets of acquisitions, and 274 buyers in acquisitions.



isolate their separate effects on small business lending. Bank acquisitions are different from bank mergers in that the target of an acquisition remains legally identifiable after the acquisition, with its own name, separate board of directors, and chief executive officer or president. This may imply that the target would continue to exercise control over the allocation of funds across various loan types. However, bank mergers are structured such that the target bank vanishes as a legal entity and becomes part of the acquirer, with no separate name, board of directors, or officers. This implies that the target may have little or no control over loan decisions.

The survey has five parts. Part A concerns the reasons for the merger or acquisition and whether the acquirer achieved its goals afterwards. The respondents were asked to rank the importance of each goal from 1 (unimportant) to 10 (extremely important). Part B concerns the effect of merger or acquisition on the bank's assets portfolio. The respondents were asked to assess whether the merger or acquisition led to an increase, no change, or decrease in the various components of the bank's assets portfolio. Part C addresses the importance of the credit decision process before versus after the merger or acquisition. Respondents were asked to rank the importance of the various aspects of their credit decision process from 1 (unimportant) to 10 (extremely important). Part D contains questions on the effects of the merger or acquisition on various aspects of the bank's small business lending. Finally, part E has questions on the ownership and managerial structure of the bank.

Table 59 displays the survey results for questions on the perceived importance of the goals or motivations for the merger or acquisition by bankers before the structural change. As discussed above, the banks were asked to rank the importance of each goal before merger and acquisition and the results after merger or acquisition. For simplicity of exposition, we grouped

rankings 1 through 3 as least important, 4 through 7 as moderately important, and 8 through 10 as most important. Table 59 shows the percent of respondents in each ranking category for all four bank groups.

The survey results show that market share was apparently not as consistently important a motivation for either merger or acquisition. While better than 30 percent of all the respondents considered market share as extremely important in their acquisition or merger, almost the same percentage of the respondents considered market share as the least important factor. Gaining entry into a new bank market was a very important consideration among over 59 percent of the buyers-in-acquisition group. About 28 percent of this group considered a new bank market as the least important consideration. Over 46 percent of the buyers-in-merger group considered a new bank market as a very important factor; however, about 30 percent of this group considered it least important.

*Operating efficiency was a very important consideration to a majority of both buyers-in-merger and targets-in-merger groups.* Over 56 percent of the former group and over 62 percent of the latter group considered operating efficiency as a very important factor in their decision to merge. Only 30 percent of the buyers-in-acquisition group had considered operating efficiency as a very important factor in their decision to acquire other banks.

*Profitability was apparently a very important factor to at least half of the respondents in the buyers-in-acquisition group (50 percent), buyers-in-merger group (72.92 percent), and targets-in-merger group (62.50 percent).* Less than 16 percent of each group considered profitability as least important in their desire to either acquire another bank or merge with another bank.

*Risk management was moderately important to a majority of the buyers-in-acquisition group (51.61 percent) and targets-in-acquisition group (54.55 percent) as a motivation to acquire another bank. However, 30 percent of this group considered risk management as least important as a motivating factor. Furthermore, about 29 percent of the buyers-in-acquisition group and 23 percent of the targets-in-acquisition group considered risk management as least important in motivating an acquisition. Neither geographic diversification of assets nor the provision of an array of financial services was very important to a large number of the respondents in any of the four groups of banks.*

Table 60 displays the perceived importance of market share, entry into a new bank market, operating efficiency, profitability, risk management, geographic diversification of assets, and the provision of an array of financial services *after* mergers or acquisitions. No majority of the groups reported that market share was a very important or least important factor after merger or acquisition. About 43 percent of the buyers-in-acquisition and about 45 percent of buyers-in-merger considered market share to be an important factor after merger or acquisition. However, over 59 percent of buyers-in-acquisition and 50 percent of buyers-in-merger considered entry into a new market as an important factor.

*Operating efficiency was apparently a very important factor after merger or acquisition to over 51 percent of targets-in-acquisition, over 55 percent of buyers-in-merger, and over 66 percent of the targets-in-merger. Only less than 16 percent of any of the groups reported operating efficiency to be least important after merger or acquisition.*

*Profitability was a very important factor after merger or acquisition to over 58 percent of buyers-in-acquisition, over 59 percent of targets-in-acquisition, over 68 percent of buyers-in-*

merger, and 53 percent of targets-in-merger. Only less than 13 percent of any of the groups reported profitability to be least important after merger or acquisition.

*Risk management was apparently not a very important factor after merger or acquisition to a majority of the respondents.* For example, only about 26 percent of buyers-in-acquisition group reported risk management as very important. However, over 48 percent of this group considered risk management to be moderately important. A similar percentage of the targets-in-acquisition group considered risk management to be moderately important also. Over 53 percent of buyers-in-merger considered risk management as an important factor after merger.

Finally, neither geographic diversification of assets nor the provision of an array of financial services was considered as very important by a majority of the groups. For example, only over 35 percent of the buyers-in-acquisition group considered geographic diversification to be very important, while about 26 percent of the same group considered provision of financial services to be very important.

*In sum, Tables 59 and 60 display the goals and the results of mergers and acquisitions, respectively. As the tables indicate, market share has not apparently been an important consideration for most of the banks. However, gaining entry into a new market, achieving higher operating efficiency, and profitability were among the most important factors that motivated mergers or acquisitions. Moreover, these are the areas in which a good majority of the respondents achieved their intended goals.*

Table 61 displays perceived effects of merger or acquisition on bank asset portfolios. The survey asked respondents whether their merger or acquisition increased, had no effect, or decreased a particular asset. *A majority of respondents in three bank groups indicated an*

*increase in their small business loans* (i.e., business loans less than \$250,000). The largest proportion (76 percent) belonged to the buyers-in-merger group, compared to over 53 for the buyers-in-acquisition group, and over 55 percent for the targets-in-merger group. About 45 percent of the respondents in the targets-in-acquisition group experienced an increase in their small business loans due to acquisition. Only a very small percentage of the respondents (less than 10 percent) reported to have experienced a decrease in their small business loans as a result of their merger or acquisition.

*A good number of respondents in each group experienced an increase in their medium-sized business loans* ranging between \$250,000 and \$1 million. Over 48 percent of the buyers-in-acquisition group and the targets-in-acquisition group experienced an increase in their medium business loans. By contrast, over 61 percent of the buyers-in-merger group experienced an increase in their medium business loans. A relatively small number of the respondents in the buyers-in-acquisition group (over 19 percent) and the buyers-in-mergers group (over 30 percent) experienced an increase in their large business loans in excess of \$1 million in size. A majority of the respondents in each group reported no change in their large business loans as a result of their merger or acquisition experience.

By contrast, a majority of the respondents in each group reported an increase in their commercial real estate as a result of their merger or acquisition experience. Only a very small minority of the respondents experienced a decrease in their commercial real estate.

Residential real estate loans seems to have benefited from bank mergers and acquisitions. A majority of the respondents in each group reported an increase in their residential real estate loans (over 51 percent for buyers-in-acquisition, over 53 percent for targets-in-acquisition, over

57 percent for buyers-in-merger, and over 63 percent for targets-in-merger). However, a majority of the respondents in each group reported no change in their credit card loans as a result of their merger or acquisition experience. Similarly, a majority of the respondents in each group experienced no change in their agricultural loans, government securities (with the exception of the buyers-in-merger group with only over 41 percent), or other securities as a result of their merger or acquisition experience.

*In sum, Table 61 shows that a majority (or near a majority) of the respondents reported an increase in small business loans (less than \$250,000) and medium business loans (\$250,000-\$1 million) due to their mergers or acquisitions. Only less than 10 percent of the respondents reported a decrease in their small business loans as a result of mergers or acquisitions. However, a smaller percent of the respondents reported an increase in their large business loans as a result of their merger or acquisition.*

Table 62 shows the perceived effects of credit decision process on small business loans before merger or acquisition. The respondents were asked to rank the perceived effects of each criteria used by banks to screen small business loan applicants from 1 (unimportant) to 10 (extremely important). Again, for simplicity of exposition, we grouped rankings 1 through 3 as least important, 4 through 7 as moderately important, and 8 through 10 as very important. *The cash flow of the borrowing firms seem to have been very important as a consideration in the credit decision process of the respondents. About 70 percent of the buyers-in-acquisition group, 57 percent of targets-in-acquisition, 81 percent of buyers-in-merger, and 52 percent of the targets-in-merger considered cash flow of the loan applicant to be very important. A very small*

minority in all the four groups considered cash flow as an unimportant factor in the credit decision process.

*A relatively large percentage of each group considered financial ratios of loan applicants as very important in loan decisions.* For example, over 51 percent of the buyer-in-acquisition group, over 39 percent of the targets-in-acquisition group, over 52 percent of the buyers-in-merger group, and over 58 percent of the targets-in-merger group considered financial ratios before merger or acquisition to be very important in their loan decision. *Collateral was even more important to the bankers.* Over 75 percent of the respondents in the buyers-in-acquisition group and over 70 percent of the respondents in the buyer-in-merger group considered collateral as a very important factor in loan decisions. The percentages for the other groups are very high as well.

*It is interesting to note from the responses that the "character of the manager" is as important (if not more important) as the cash flow of the borrowing firm, financial ratios of the borrowing firm, collateral, appraisals of borrower's assets, documentation, or managerial expertise of the borrowing firms in the process of screening loan applicants.* For example, over 72 percent of each group said the character of the manager of the borrowing firm was very important in deciding to grant the firm a loan. Consistently, personal relationships between the firm and the bank was also very important to a majority of the respondents in each group.

Table 63 displays the perceived effects of credit decision criteria on small business lending after merger or acquisition. The factors that were very important in making small loan decisions before merger or acquisition were also very important (and in some cases more important) after merger or acquisition. For example, the cash flow of borrowing firms was very important to over

87 percent of the buyers-in-acquisition group, over 78 percent of the targets-in-acquisition group, over 91 percent of the buyers-in-merger group, and over 86 percent of the targets-in-merger group.

*In sum, Tables 62 and 63 display the perceived effects of credit decision process on small business loans before and after merger or acquisition, respectively. In general, four characteristics of the loan applicants seem to play a very important role in the credit decision process of a relatively large majority of the respondents before and after merger or acquisition: cash flow, financial ratios, collateral, and, most importantly, character of the manager of the borrowing firm. Also, these results seem to indicate that credit scoring methods are not very important in small business lending decisions.*

Table 64 displays the perceived effects of mergers or acquisitions on various aspects of small business lending across the four groups. Respondents were asked whether, for example, (among other factors) profitability, risk of default, loan fees charged to borrowers were increased, experienced no change, or decreased as a result of mergers or acquisitions. A greater percentage of the respondents in each group said they experienced no change in their profitability of small business loans than those who experienced an increase or decrease in profitability. Only a very small percentage of the respondents experienced a decrease in their profitability associated with small business lending due to merger or acquisition.

A relatively large fraction of the respondents reported no change in the risk of default in their small business lending as a result of merger or acquisition. A very small percentage of the respondents in all the four groups of banks reported a decrease in the remaining factors (i.e., number or dollar value of small business loans, rates or fees charged on small business loans,



approval rate, retention of old customers, promotional activities, time it takes to process small business loans, offering of related services or new loan programs to small businesses, or costs of processing small business loan applications). A relatively large fraction of the respondents (in most of the cases over 50 percent) experienced no change in their small business lending practices as a result of their merger or acquisition.

*In sum, Table 64 results indicate that a greater percentage of the respondents experienced no change in the following factors associated with small business loans: profitability, risk of default, number or dollar value, finance charges, approval rate, time to process loans, and offering of related loans.*

Tables 65 through 70 present means of the responses to each question on the survey and the student-t tests between any two bank groups of the effects of mergers or acquisitions on various aspects of small business lending. Table 65 presents the means of the perceived importance of the goals of mergers or acquisitions and the student-t tests of the difference between the means. The means represent the averages of the rankings (ranging from 1 = unimportant to 10 = extremely important). *In most of the cases, we found no statistically significant difference between the means. For example, in only two out of the seven questions, we found a statistically significant difference between the means of the responses by buyers-in-acquisition and buyers-in-merger.* The two cases are operating efficiency and profitability in which the buyers-in-acquisition ranked operating efficiency and profitability lower than did buyers-in-merger.

Table 66 displays the means of the perceived importance of market share and profitability (among other factors) *after* merger or acquisition. The t-tests between bank groups are not

different statistically in most of the cases. Table 67 presents the means of the perceived effects of mergers or acquisitions on assets portfolio. Here again we found that in about 90 percent of the cases there were no differences between the bank groups. Table 68 shows the means of the perceived importance of credit decision process before merger or acquisition and the t-tests for the difference between the means across bank groups. Table 69 gives similar results after merger or acquisition. Character of managers, cash flow of borrowing firms, managerial expertise, collateral, and personal relationship between the firm and the bank were among the most important factors both before and after merger or acquisition. However, *in most of the cases we found no statistically significant differences between the various bank groups.*

In parentheses Table 69 also gives the results of t tests for differences in mean responses before and after merger and acquisition with respect to Tables 68 and 69, respectively. Most of the t statistics are positive and significant in sign. Interestingly, the personal relationship item is the only item in this section of the questionnaire that is not significant in all four bank samples. *An important inference is that merger and acquisition tends to increase the objectiveness of the credit decision process and, in turn, may diminish the value of bank relationships by small business borrowers.*

Finally, Table 70 displays the means of the perceived effects of merger or acquisitions on various aspects of small business lending such as profitability, risk of default, and interest rates charged among other factors. The closer are the means to zero, the higher the probability that the merger or acquisition experienced by the average bank in our sample did not affect the various aspects of small business lending. The closer the means are to negative one, the higher the probability that the average bank experienced a decrease in the magnitudes of the various aspects

listed in the table. And finally, the closer the means are to one, the higher the probability that the average bank experienced an increase in the magnitudes of the various aspects of small business lending listed in the table. Most of the means are positive (with the exception of risk of default) and closer to zero than to one, implying that the merger or acquisition did not have a significant effect on these aspects of small business lending. In addition, the t-tests between the various means across bank groups show that in an overwhelming majority of the cases banks did not experience different impacts

*In sum, Tables 65 through 70 display the means of the variables on the questionnaire and the t test of the differences of the means across the four bank groups. While we observed some differences across bank groups in a small number of cases, an overwhelming majority of the cases showed no difference across the bank groups with respect to the respondents' merger or acquisition experience. Thus, we conclude that in general the four bank groups in our sample had a similar experience with respect to merger or acquisition. Furthermore, we find some evidence that merger and acquisition tends to increase the objectiveness of the credit decision process and, in turn, may diminish the relative value of bank relationships by small business borrowers*

## **VI. Summary, Conclusions, and Implications**

The Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 enables U.S. banks to purchase banks across state lines without state approval and branch across state lines, with the exception of Texas that opted to reject the interstate branching provision. No doubt it has accelerated the on-going consolidation movement of bank mergers and acquisitions. While

there clearly are economic motivations for these structural changes in the banking industry, there is some concern about their implications to small business firms across the country, which rely heavily on bank credit for most external financing needs. Data collected from the Call Reports for all insured U.S. commercial banks indicate that the total supply of business loans under \$250,000 in size has increased in recent years but at a much slower rate of increase than large business loans over \$1 million in size. These trends suggest that banks are allocating larger quantities of loanable funds to medium- and large-sized firms relative to small business firms. Is this difference in credit allocation attributable to structural changes in the banking industry? In this paper we provide empirical analyses that attempt to answer this question.

In section III we test the research hypothesis that small business lending is related to different variables that capture bank structure. With respect to BHCs, holding a number of factors constant in a multivariate context, we found that member banks tended to make more small business loans (SBLs) as a proportion of total assets compared to independent banks. However, holding asset size constant, members of large BHCs tended to have lower SBL ratios than members of small BHCs. Additionally, we found that banks in states previously allowing national entry of MBHCs or allowing statewide MBHCs tended to have lower SBL ratios. Of course, more liberal state laws on bank expansion tend to encourage a greater degree of bank consolidation than in other states. For branch banks the results were similar to those for BHCs in many ways. Branch banks tended to make more SBLs than banks with no branches. However, large branch bank organizations tended to have lower SBL ratios than small branch bank organizations. And, states allowing statewide branching tended to have lower SBL ratios compared to states with limitations on statewide branching. *Together, these results suggest that*

*the current trend toward large BHCs and large branching organizations likely will have a negative effect on small business credit supplies.* We did find that BHCs with greater geographic diversification tended to have higher ratios of very small business loans (i.e., less than \$100,000) than other banks. Also, young banks tended to have higher very small business loan ratios than older banks. Consequently, to the extent that BHCs develop highly diversified national franchises and de novo banks enter into small business markets under served by large banks, there are some countervailing forces that could mitigate declines in small business credit during the current consolidation movement.

In section IV we gathered samples of bank targets and buyers in acquisitions in the second half of 1993 and 1994. The main research hypothesis is that changes in small business lending activity before and after acquisition are related to different variables that reflect bank structure. In this regard, there are two competing hypotheses: (1) the size hypothesis contends that target banks benefit from joining a larger aggregate organization, which results in increased credit supplies to bank customers; (2) the siphoning hypothesis argues that the larger aggregate organization will spirit away funds from the smaller target bank or reallocate credit consistent with the objectives of the parent company. We found that the total asset size of the target banks had a significant positive relationship with changes in SBL ratios before and after bank acquisitions -- that is, the evidence tended to support the size hypothesis, rather than the siphoning hypothesis. Evidence on whether or not banks that were independents or members of one-bank holding companies before acquisition changed their SBL ratios after being purchased by a larger organization was mixed, such that, *at least in the short run*, no clear inferences on how structural change affects small business lending activity can be made. Finally, analyses of

aggregate data for buyers and targets in acquisitions and mergers revealed that, when targets of simpler organizational forms join more complex organizations (i.e., large BHCs and branch banks), there are greater increases in small business lending compared to targets of complex organizations. This short-run evidence again tends to support the size hypothesis, rather than the siphoning hypothesis. Moreover, *intrastate mergers are more beneficial to small business lending than interstate mergers, which can be interpreted to mean that mergers across state lines are not motivated by increasing access to the small business loan market.* Such interstate mergers are more likely motivated by the desire to expand a banking organization's large business loan market.

In section V we discuss the results of a survey of bankers involved in mergers and acquisitions in the second half of 1993. The main research hypothesis is that small business lending volume and the credit evaluation process are related to mergers and acquisitions. The results indicated that market share was not been an important motivation for most bank mergers and acquisitions. However, gaining entry into a new market, achieving higher operating efficiency, and profitability were important factors. Many respondents reported an increase in small business loans (less than \$250,000) and medium business loans (\$250,000-\$1 million) due to their mergers or acquisitions. Less than 10 percent of the respondents reported a decrease in their small business loans as a result of a structural change. Also, less than 10 percent of the respondents reported an increase in their large business loans. Four characteristics of the loan applicants seem to play a very important role in the credit decision process of a relatively large majority of the respondents before and after merger or acquisition: cash flow, financial ratios, collateral, and, most importantly, character of the manager of the borrowing firm. Moreover,

results indicate that a greater percentage of the respondents experienced no change in the following factors associated with small business loans: profitability, risk of default, number or dollar value, finance charges, approval rate, time to process loans, and offering of related loans. Interestingly, statistical tests indicated that merger and acquisition tends to increase the objectiveness of the credit decision process and, in turn, may diminish the relative value of bank relationships by small business borrowers. *Thus, while most of the findings suggest that bank mergers and acquisitions do not appear to change the credit decision process for small business loans, some evidence points to increased emphasis on objective criteria, as opposed to subjective relationship factors.*

Our study results appear to be consistent with previous findings in the literature for the most part. The following discussion summarizes relevant studies discussed in more depth in appendix A:

- Peek (1997) concluded that mergers did not change the small business lending behavior of the acquirer. If the acquirer had not focused on small business lending prior to the merger, the consolidated merger tended to manifest a similar behavior after merger. However, if the acquirer had focused on small business lending prior to the merger, it was likely to maintain that focus after merger. Acquisitions of targets with a large portfolio of small business loans were shown to be detrimental to small business customers of the acquired banks. However, acquisitions of targets with a small portfolio of small business loans did not substantially affect small business customers of the acquired bank.

- Peek and Rosengren (1995) studied 13 bank mergers in New England and found that small business lending declined as a result of the mergers in 8 cases but increased in the remaining 5 mergers. They concluded that most mergers by relatively large banks resulted in a decline in small business loans.

- Keeton (1995) examined the effect of branching and multi-bank holding company (MBHC) status on small business lending behavior of banks in the Tenth District. He concluded that small business loans appear to be lower in banks with a large number of branches than banks with a small number of branches. In addition, MBHCs had significantly lower small business loans ratios than their corresponding peer group. This result seems to be consistent with our findings that mergers and acquisitions involving

large and complex organizations (i.e., MBHCs) tend to have an adverse effect on small business lending.

- Whalen (1995), based on 1993 data for banks in Illinois, Kentucky, and Montana, compared out-of-state holding company (OSHC) member banks, in-state holding company member banks (ISHC), and independent banks to one another and found that independent banks generally made less small business loans than either OSHC or ISHC banks. In addition, ISHC banks with \$300 million - \$1 billion tended to make more small business loans than ISHC banks. However, opposite results were found for banks larger than \$1 billion.

- Berger and Udell (1995) used 1994 data and found that large and complex banks tend to make fewer small business loans than other banks. However, they suggested that the trend toward consolidation does not necessarily reduce credit availability to the small business community -- if there is a demand for small business loans, other financial institutions may fill the gap.

- Strahan and Weston (1995), based on June 1995 Call Report data, found that except for banks over \$5 billion in assets, members of BHCs made fewer small business loans than other banks. They found no statistical significant difference between banks owned by out-of-state and in-state BHCs.

- Keeton (1996), based on a sample of bank mergers and acquisitions in the Tenth District States in 1986-1995 period, found that mergers by out-of-state urban banks significantly lowered both business and farm lending. However, this effect was not evident among bank holding company acquisitions.

In general, the literature manifests mixed results, which is not surprising due to the differences in bank samples, time periods, and statistical methodologies. However, the weight of the evidence in our study and those of other researchers is more negative than positive in terms of the potential effects of banking industry consolidation on small business lending. Apparently, small business firms across the country can expect some difficulties in obtaining bank credit as the banking industry undergoes a period of structural change and resultant adjustments in competitive market conditions. Whether these negative effects are short-run or long-run in nature is not possible to discern from the data at this time. Future research is needed to further examine the effects of on-going consolidation on small business credit over time.



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## APPENDIX A: RELEVANT LITERATURE

### *U.S. Studies*

Previous empirical research on small business lending by U.S. commercial banks has been sparse due to the lack of available data. In June 1993, pursuant to the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), Congress required all commercial banks for the first time to include in their Call Reports schedule RC-C entitled "Loans to Small Businesses and Small Farms." This schedule contains cross-sectional information on different categories of small commercial and industrial and commercial real estate loans. In this section we review recently published studies that utilize this new data source to examine the effects of the bank consolidation on small business lending.

*Peek and Rosengren (1995)*. This study focused on the small business lending impact of bank acquisitions in New England and found that such lending declined among small banks that were acquired by large banks. A total of 13 mergers from June 1993 to June 1994 were sampled. Acquired bank (target) and acquiring bank (buyer) balance sheet data were summed before and after the merger. The June 1993 and June 1994 Call Reports were used to calculate the change in small business loans (SBLs), defined as the sum of commercial and industrial and commercial real estate loans under \$1 million divided by total assets. In 8 of 13 banks a negative change in SBLs occurred, while 5 of 13 banks had positive change results.<sup>1</sup> After carefully evaluating each merger, they observed that "... most acquisitions by larger banks actually result in a shrinkage of small business loans. Thus, it appears that most of these acquisitions are driven by reasons other than acquiring the small business loans of smaller banks." (1995, p. 22) Other reasons, such as

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<sup>1</sup> The authors take into account formal regulatory actions that forced a merger of a failing bank. Such banks tend to curtail overall growth due to regulatory pressure.

increasing core deposits, expanding geographic diversification, or reducing operating costs, were suggested as potential motivations for the mergers.<sup>2</sup>

Peek and Rosengren then explored the possibility that de novo banks could help to overcome the decline in SBLs due to bank consolidation. Data for 45 de novo banks gathered in the period 1985-1994 that were operating for at least two years revealed that their ratio of small business loans to total assets was in the range of 28-34 percent compared to about 23 percent for other banks of comparable size. However, most of the de novo banks remained relatively small (i.e., below \$100 million in assets) even after a decade of operations. Hence, the authors inferred that the de novo banks would not have a substantial effect on a potential shortfall of capital to the small business sector due to declining credit associated with the consolidation of the banking sector.

*Keeton (1995).* Keeton investigated the relationship between multi-office banking and small business lending. Arguments for and against small business lending by large, multi-office banks discussed there were:

***For:***

- they are more diversified and have greater access to loanable funds that tend to reduce the risks and costs of SBLs;
- they can shift funds from low to high demand areas and thereby maintain higher levels of lending over time; and
- they can benefit from deregulation of geographic restrictions on bank expansion that enable them to enter more markets and obtain scale economies.

***Against:***

- they do not need SBLs to spread credit risks among more loans, as in the case of small banks.
- they have more rigid lending rules that are more likely to screen out small business borrowers; and
- they purchase small banks to "siphon" off deposits and make loans to preferred large business customers.

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<sup>2</sup> As cited by the authors, Whalen (1994) found that intracompany mergers of subsidiary banks in a multibank holding company (MBHC) tended to increase MBHC share prices, and Cornett and Tehranian (1992) reported that merged banks have higher performance than other banks on average.

Keeton noted that few studies in the past could make inferences about the SBL policies of commercial banks due to the lack of data. Some studies have overcome this shortfall by using survey methods. For example, Struck and Mandel (1983) and Markley (1990) found that small business firms were more likely to face credit constraints in states with a high degree of multi-office banking. By contrast, Leeth, Scott, and Dunkelberg (1987) found no such constraints in high multi-office banking states.

Keeton collected June 1994 Call Report data on SBLs for Tenth District banks. SBLs were proxied by the ratio of commercial and industrial loans under \$100,000 to total deposits. The analyses compared each branch bank organization to a peer group<sup>3</sup> (i.e., nonmulti-office organization) and reported the following evidence:

<u>Degree of branching</u>	<u>Percent with higher ratio than peers</u>	<u>Percent with lower ratio than peers</u>
Moderate	49	51
High	31	69

SBLs appeared to be lower in highly branched banking organizations<sup>4</sup>, but no difference was found for moderately branched organizations. Further analyses compared banks with different multi-bank holding company (MBHC) status to similarly constructed peer groups: (1) lead banks of MBHCs, (2) all other banks owned by in-state MBHCs, and (3) banks owned by out-of-state MBHCs.

<sup>3</sup> Keeton made peer group comparisons of small business lending as follows: (1) the small business ratio of loans under \$100,000 to total deposits for all unit banks was regressed on total deposits, location, and holding company status; (2) this regression equation was then used to estimate the predicted small business ratio for each branch bank -- a so-called "peer ratio;" and (3) the predicted ratio of the peer group was subtracted from the branch bank's actual small business ratio.

<sup>4</sup> Keeton cautioned that some banks with many branches did make considerable small business loans.

<u>Type of bank</u>	<u>Percent with higher ratio than peers</u>	<u>Percent with lower ratio than peers</u>
Banks owned by in-state MBHCs		
Lead banks	50	50
Other banks	38	62
Banks owned by out-of-state MBHCs	29	71

Excluding lead banks, MBHCs had significantly lower SBL ratios than their corresponding peer groups, all else the same.<sup>5</sup> The author concluded that "... multi-office banks tend to lend less to small businesses than other banks ... (and) that further growth in multi-office banking may impose costs on some small businesses." (1995, p. 53)

*Whalen (1995)*. Additional evidence on bank holding company affiliation and SBLs is provided by Whalen. Utilizing June 1993 data, the analyses focused on states with limited branching rules that restricted expansion within a single county -- i.e., 1,377 banks in Illinois, Kentucky, and Montana. Out-of-state holding company (OSHC) affiliated banks, in-state holding company (ISHC) affiliated banks, and independent banks were compared to one another. The author noted that the length of holding company affiliation was not addressed in the study, but cited Johnson and Meinster (1975, p. 5) in this regard, who found that holding company affiliation affected banks with a lag over time.

Banks were grouped by asset size into less than \$100 million, \$100-\$300 million, \$300 million to \$1 billion, and greater than \$1 billion. Defining SBLs as the ratio of commercial and

<sup>5</sup> Again, a peer ratio is estimated for each MBHC by regressing the small business ratio for all independent banks on the bank's average deposits per market, distribution of deposits across markets, and degree of branching. The predicted (or peer) MBHC ratio is estimated by inputting the same independent variables for each MBHC.

industrial and commercial real estate loans to total assets,<sup>6</sup> univariate t tests of mean differences indicated that:

- for the two smaller bank size groups, regardless of the dollar size of SBLs (i.e., less than \$100,000, less than \$250,000, and less than \$1 million), independent banks generally made less SBLs than OSHC and ISHC banks, which was statistically significant in some instances. Also, small ISHC banks tended to make more small business loans than small OSHC banks but the results were not statistically significant in most all cases.
- for the two larger bank size groups, the results are mixed for ISHC and OSHC banks. ISHC banks with \$300 million to \$1 billion (greater than \$1 billion) tended to make more (less) SBLs than OSHCs. No large independent bank sample could be constructed for statistical comparisons.

Importantly, these results suggest that multi-office banking and interstate banking do not necessarily discriminate against SBLs; indeed, in many cases these types of banking organizations are associated with increased SBLs.

Further analyses examined differences in loan yields and earnings margins between the three types of banks. These analyses focused on small commercial and industrial loans and agricultural production loans. Due to the inclusion of agricultural loans, it was assumed that farming is a type of small business. Briefly, univariate and multivariate results showed that independent banks typically had lower operating costs and higher margins than banks affiliated with holding companies. He also reported that thrift competition for small commercial loans did not influence bank margins, which is not surprising in view of the low thrift competition for small

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<sup>6</sup> Whalen tested other small business loan definitions but these particular results are most interesting because they depend on the same definition used in our analyses.

business customers. Whalen concluded that, "Taken together, the results indicate that interstate holding company affiliation has not had a discernible adverse effect on small business lending in these three states, at least to date." (1995, p.34)

*Berger and Udell (1995).* Berger and Udell combined different data sources to test hypotheses concerning SBLs and the potential for reduced credit supplies due to large bank size and high organizational complexity. Data were collected from the June 1994 Call Report, the Federal Reserve's Survey of Terms of Bank Lending to Business (STBL), and the Consolidated Report of Condition for bank holding companies (Y-9C). Regression analyses were conducted for a variety of data sets. Relevant to the present work, the results for the quantity of small business credit confirmed the common notion that large, complex banks tend to make fewer small business loans than other banks. Interestingly, the authors inferred that, "... these findings do not necessarily suggest that the trend toward consolidation in the U.S. banking industry will result in a great contraction of credit to this segment of the business community because other institutions may pick up much of the slack left by consolidation." (1995, p. 41) They emphasized the local roots and expertise of community-level banks give them an advantage over large banks in relationship-type loans demanded by small businesses. Also, they observed that, despite the long-standing dominance of large, statewide branch banks in California, many small banks still exist there (i.e., 204 of 382 banks had assets less than \$100 million as of mid-1994). Moreover, in Germany and Switzerland, large universal banks comfortably co-exist with small banks due to their distinctly different market niches. They inferred from these examples that large banks' diseconomies in delivering credit services to small firms may well place an upper limit on the extent of their growth via consolidation.



*Strahan and Weston (1996).* Strahan and Weston measured the effects of bank consolidation on SBLs by examining BHC affiliation and bank mergers. Using June 1995 Call Report data, SBLs (defined as the ratio of commercial and industrial loans less than \$1 million to total assets) for banks owned by large BHCs (i.e., greater than \$1 billion in assets) were compared to independent banks and banks owned by small BHCs (i.e., less than \$1 billion in assets). Statistical t tests for differences in mean SBL ratios for different asset size groups of banks (i.e., less than \$100 million, \$100 - \$300 million, \$300 million - \$1 billion, \$1 - \$5 billion, and greater than \$5 billion) revealed that, except for banks over \$5 billion in assets, banks owned by large BHCs made fewer SBLs than other banks. Among banks owned by large BHCs, there was no difference in SBLs between banks owned by out-of-state and in-state BHCs. They inferred from this evidence that "... the costs of providing credit to small borrowers are lowest in small banking companies. If so, we would expect at least some small banking companies to survive the wave of consolidation and continue to serve the credit needs of small businesses." (1996, p. 5)

The authors also tested for significant changes in SBLs before and after bank mergers. A sample of 180 mergers between June 1993 and June 1994 was selected, and changes in SBLs were calculated using the June 1993 and June 1995 Call Reports. The June 1993 data were constructed by means of a "pro forma" bank that is the sum of the two banks' SBLs prior to their merger. A control group of matched sample banks with total assets equal to the pro forma bank in 1995 was selected. Some of the statistical findings are as follows:

<u>Pro forma bank asset size</u>	<u>n</u>	<u>1993-1995 Change in SBL Ratio</u>		<u>t statistic</u>
		<u>Merged banks</u>	<u>Control banks</u>	
<\$300 million	102	1.00	0.05	1.90*
\$300 million - \$1 billion	39	-1.46	-1.38	-0.10
>\$1 billion	39	-0.11	-0.78	1.23

\*Statistically significant at the 10 percent level.

Mergers involving small banks yielded a significant increase in SBLs relative to their control group. Medium- and large-sized mergers did not result in an increase in SBLs. Thus, the authors concluded that the on-going consolidation in the banking industry will not decrease credit supplies to small businesses.

*Keeton (1996)*. A peripheral but related study by Keeton examined the effects of 652 bank mergers and acquisitions in the Tenth District States in the period 1986-1995 on business and farm lending. Regressing the logarithm of total loans in each category on variables for time, the size and location of the bank's operations, and previous mergers and acquisitions over the past 12 quarters, he found that mergers by out-of-state urban banks significantly lowered both business and farm lending but this did not occur in the case of acquisitions. It should be noted that Keeton sorted out acquisitions of banks that were independent banks or the lead bank in a BHC (that then moved to a more junior position in the consolidated entity) and acquisitions in which the bank was a member of a BHC in a non-lead (or junior) position. Acquisitions of the former type were considered to have potentially greater effects on lending practices (as were mergers). In general, Keeton inferred that the evidence provided partial support for the concern of critics, who argue that interstate banking will reduce local, community-level bank lending.

*Peek (1977)*. This study examined the way bank acquisitions influence the willingness of a banking organization to lend to small businesses. The research is based on all FDIC-insured

commercial and state-chartered savings banks in the United States for two periods: (i) June 1993 to June 1994, and (ii) June 1994 to June 1995. The study compared three bank groups -- namely, acquiring banks in a bank merger, target banks in a bank acquisition, and banks that did not experience any form of acquisitions during the period of investigation. The latter set is used as a control group. Bank holding companies and targets of mergers are removed from the sample. The study focused on nonfarm, nonresidential real estate loans and commercial and industrial loans less than \$250,000 or less than \$1 million.

Peek found that the consolidation trend in the banking industry has primarily reduced the number of small versus medium-sized or large banks. In addition, *de novo* entry has not had much impact on the reduction of the small banks stemming from consolidation. And, there appeared to be no pattern between the degree of the reduction in the number of small banks and the share of small banks in a district.

Another finding of the study is that the consolidation trend has primarily manifested itself in mergers or acquisitions involving two (or more) small banks, rather than the popular notion of large banks acquiring small banks. Peek observed that, in about half of the mergers, the acquirer was a bank with a greater portfolio of small business loans than the target.

Target banks in acquisitions seemed to be sensitive to the change in their ownership with respect to small business lending. More specifically, the small business lending behavior of target banks with a relatively large portfolio of small business loans is more heavily affected by consolidation than that of target banks with a relatively small portfolio of small business loans. Thus, if the target bank was heavily involved in making small business loans prior to change in ownership, acquisition was detrimental to credit availability to its small business loan customers.

Finally, acquirers in a bank merger had a tendency to continue their small business lending behavior after the acquisition. In other words, the acquirer's commitment to small business lending prior to the merger determined its commitment to small business lending after the merger.

*Summary of U.S. Related Banking Studies.* Recent studies on how U.S. bank consolidation has affected small business lending have reported mixed results. It is generally agreed that large, complex banks are less interested in small business lending than other banks and that there is no difference in small business lending for banks that are members of an interstate versus intrastate banking organization. However, while some studies found no adverse effect (and in isolated instances a beneficial effect) of bank consolidation on small business lending, other researchers have uncovered an adverse relationship. For example, Peek and Rosengren reported decreases in small business lending associated with bank acquisitions, Keeton likewise found decreases in small business lending among multi-office banks with a high degree of branching and with multi-bank holding companies, and Peek noted that targets of acquisitions that were active small business lenders experienced decreases in such lending after the acquisition. Keeton and other authors have been careful to point out that decreases in small business credit from some banks do not necessarily imply a long-term decline in such credit supplies. According to this line of reasoning, small banks and other financial service sellers can be expected to step into the demand gaps that inevitably will occur during the consolidation process over the next decade. Thus, the current structural transitions in the banking industry will cause gradual changes in the roles of different banks and financial institutions in the small business loan market with little or no net negative effect on small business credit supplies.

On the other hand, a major factor in the Riegle-Neal Act of 1994 that will impact small banks in the U.S. is interstate branching powers effective June 1, 1997 (unless a state chooses to opt out). In Texas the opt-out provision was adopted due to concern about the potential negative effects of interstate branching on small business lending and community development. In this regard, Moore (1995) examined small banks' market shares in the U.S. during the 1982-1995 period and found that substantial declines had occurred in the number of small banks and their aggregate total assets. However, these declines were not associated with states' liberalization of geographic barriers to entry in banking. Instead, consistent with work by Kaufman (1991), he inferred that innovations in bank technology and communications had been responsible for this trend. That is, modern production processes allow banks to expand their market reach beyond their limited physical locations. Moore concluded that "... it would appear that the recent legislation is not likely to have a dramatic effect on small banks' market share as a whole." (1995, p.9)

### *The Canadian Experience*

Compared to the U.S., Canada has a highly concentrated banking system. As of 1994 Canada had 61 chartered banks with a total of about 7,700 branches nationwide and about \$771 billion in total assets.

The 1980 Bank Act created two types of banks in Canada. Schedule I banks are primarily owned by Canadian citizens and are widely traded, with the provision that no one party may own more than 10 percent of any of these banks. Schedule I banks consist of the largest 6 Canadian banks. Schedule II banks make up the remaining 55 banks. They are relatively smaller than the Schedule I banks and are primarily foreign-owned.

Of the 61 chartered banks in Canada, Schedule I banks account for about 90 percent of all assets and are branched out nationwide. Schedule II banks are primarily limited to specific geographic regions. The two bank types have the same powers.

Given the concentration of the banking system and the distribution of assets amongst chartered banks, small businesses are heavily dependent on the largest six banks for financing. Figure 1 shows the market share across financial institutions for small business loans (SBLs) for 1988 and 1994. As the figure shows, the largest 6 banks had a total of 90.0 percent and 79.6 percent of the SBL market in 1988 and 1994, respectively. Thus, large banks made most small business loans. Other chartered banks (i.e., the remaining 55 banks) had only 2.5 percent and 3.4 percent shares of SBLs in 1988 and 1994, respectively. Credit unions and caisses populaires had the second largest market share with a total of 9.4 percent (1988) and 13.2 percent (1994) shares of small business loans. (Canadian Federation of Independent Business, 1994).

SBLs (i.e., loans less than Canadian \$1 million) are a relatively small percentage of total loans in Canada. The data shown below show the distribution of various loans between 1987 and 1992:

	1992		1991		1990		1989		1988	
	\$Millions	%	\$Millions	%	\$Millions	%	\$Millions	%	\$Millions	%
Bus. loans <\$0.5 mil.	17,642	3.5	17,429	3.8	19,213	4.3	20,881	5.1	18,817	5.1
Bus. loans \$0.5-1.0 mil.	6,152	1.2	6,321	1.4	6,684	1.5	6,426	1.6	5,622	1.5
Bus. loans >\$1.0 mil.	66,682	13.1	61,776	13.3	59,607	13.3	54,918	13.5	48,362	13.0
Agricultural loans	7,757	1.5	8,061	1.7	7,891	1.8	7,893	1.9	8,189	2.2
Nonresidential mortgages	10,233	2.0	9,102	1.9	7,527	1.7	6,924	1.7	5,927	1.6
Personal loans	64,970	12.8	65,637	14.1	65,732	14.7	62,407	15.3	57,314	15.4
Residential loans	130,239	25.7	114,591	24.6	102,675	22.9	89,629	22.0	75,706	20.4
Other loans*	203,915	40.2	182,436	39.2	179,412	40.0	158,246	38.9	151,458	40.8
Total loans	507,590		465,353		448,741		407,324		371,395	

\*Includes foreign currency securities.

Source: Canadian Bankers Association, *Bank Facts*, 1993.

Notice that SBLs ranged between 6.85 percent (in 1987) and 4.69 percent (1992) of total loans. It is also interesting that the proportion of small business loans has dropped consistently over the years. However, business loans greater than \$1 million have remained in the 13 percent range between 1988 and 1992. One explanation for these trends is the increasing importance of large banks in Canada; however, further study is needed to confirm this casual inference.

The Canadian Federation of Independent Business (CFIB), an institution whose members are small Canadian businesses, has collected, analyzed, and disseminated information on various aspects of SBLs for several years. The CFIB has been particularly concerned about the lending behavior of financial institutions with respect to SBLs. The following discussion on the different aspects of SBLs in Canada draws heavily on recently published results by CFIB (1994) from responses from a survey of 10,903 small businesses.

The 1994 survey and surveys from previous years revealed that small businesses in Canada have faced increasing problems in obtaining loans from financial institutions. Figure 2 shows a clear upward trend in the problems of securing SBLs in the years 1983 through 1994. The figure shows that about 15 percent of the survey respondents indicated having had problems in obtaining loans in 1983. In 1994, however, 35 percent of the survey respondents cited problems, an increase of 133 percent.

These results match closely with data on the lending behavior of chartered banks. Figure 3 shows quarterly data for loans less than \$200,000 and loans greater than \$200,000. The trend for loans under \$200,000 is downward, whereas the trend for loans over \$200,000 is upward. Specifically, small loans dropped about 27 percent, while large loans increased about 8 percent between the first quarter of 1990 and the fourth quarter of 1992.

The CFIB identified four major sources of financing problems for small businesses: loan turn-downs, high interest rates, high collateral coverage, and account manager turnover.

Information on these problems was aggregated across Canadian financial institutions. The results generally showed a consistent behavior in that the relatively large financial institutions fare worse than others in terms of being cited as a primary source of small business financing problems.

While this is true in general, there are also exceptions. For example, while credit unions had the lowest percent of loan turn-downs, they charged the highest interest rates. Except for the high interest rates, credit unions are considered by the CFIB to be the best performers as far as SBLs are concerned.

Figure 4 adapts information from the CFIB to show the aggregated results across different financial institutions for loan turn-downs, interest rates, collateral coverage, and account manager turnover. Credit unions had the lowest loan turn-downs (9.7 percent compared to 19.3 percent by Trust finance companies) but the highest interest rate. Of the largest 6 chartered institutions, Toronto-Dominion Bank, the Canadian Imperial Bank of Commerce, and the Royal Bank were generally the major sources of small business financing problems.

Based on the CFIB survey, the data shown below indicate that demand for credit generally rises with business size, as measured by the number of firm employees.

#### Size of Loans Requested by Size of Business

<u>Number of Employees</u>	<u>\$Median</u>	<u>\$Average</u>
0-4	25,000	79,189
5-9	50,000	134,650
10-14	90,000	166,265
15-19	100,000	293,341
20-49	200,000	474,070
50-99	500,000	1,060,660
>100	1,000,000	1,880,151



Relatedly, the financial institutions' willingness to supply SBLs and the interest charged seem to depend on the size of the firm applying for the loan and its age. Figure 5 shows that in 1988 and 1994 there was an inverse relationship between loan rejections and the size and age of the firm applying for the loan. The only exception seems to be firms with more than 100 employees, which appear to have a higher rate of loan rejection than firms with 50 to 99 employees. Figure 6 shows loan rejections by size of the loan. Consistent with the firm size results, the larger the loan size, the lower was the percent of loan rejection.

It is noteworthy that loan rejection rates seem to have also depended on the number of account managers dealt with by the loan applicant. The greater the number of account managers involved in the past three years of the loan application, the greater the loan rejection rate. For example, Figure 7 shows that, when the loan applicant dealt with only one account manager, loan rejection rates were 8.5 percent and 11.3 percent in 1988 and 1994, respectively. However, when the number of account managers involved exceeded more than three, the rejection rates were 17 percent and 26.3 percent in 1988 and 1994, respectively.

One reason for the loan rejection rate to increase with the number of account managers (or alternatively with the turnover of account managers) is that the extent and quality of the relationship between the loan applicant and the loan supplier depends on the longevity of the relationship with the loan officer in charge. The shorter the relationship, the worse the quality of the relationship. Apparently, a new loan officer does not have as much information on the loan applicant as the former loan officer -- that is, financial institutions do not seem to retain organizational information about the loan applicant. Such information is privately held by the loan

officer in charge, and when the loan officer is moved within the organization or leaves the organization, it is lost.

The interest rate charged the loan applicant also appeared to depend on the size of the loan applicant, its age, and the number of past account managers the applicant had encountered. Data reported in Figure 8 suggests that there is an inverse relationship between interest rates and both the size and age of the loan applicant firm. Small and relatively young firms seem to have been charged the highest interest rates. Moreover, Figure 9 suggests that loan interest rates are positively related to the number of account managers dealt with in the loan application process.

*Summary of the Canadian Experience.* The CFIB survey results indicate that small and young businesses in Canada do not fare as well as their larger and older counterparts in terms of credit availability and contractual terms. Loan rejection rates and interest rates seem to be higher for small and younger businesses than for large and older firms. Of course, this finding is not surprising in light of the greater default risk of small versus large firms. Alternatively, the results reflect economies of scale and scope in producing loans. The cost of obtaining information on a loan applicant may not totally depend on the size of the loan, as the same type information is sought almost regardless of the size of the loan. Thus, the larger the loan (scale), the lower the transaction costs per dollar of the loan. Lower cost per dollar loan may translate into lower interest rates, all else constant. Additionally, it is likely that large loan applicants have a greater variety of business relationships (scope) with their financial institutions than do small loan applicants. Financial institutions may use the same information about their relatively large clients across various transactions, thus lowering transaction costs per activity. In other words, the greater the variety of transactions with the same loan applicant, the lower the transaction costs

per activity, all else equal. Unfortunately, the CFIB report did not attempt to explain the underlying reasons for differences in large versus small institutions' behavior with respect to small business lending.

Finally, we should note that the CFIB survey analyses rely entirely on univariate analyses, e.g., the effect a given variable (say, size of loan) has on another variable (say, loan rejection rate). These univariate results are biased to the extent that they fail to simultaneously account for the effects of other pertinent variables. For example, loan size may have no effect on the loan rejection rate, if the effect of loan risk was simultaneously taken into account. Further study is needed to make sure the results are robust to multivariate model specifications.

**APPENDIX B: BANK SURVEY OF  
SMALL BUSINESS LENDING PRACTICES**

April 21, 1997

President's Office  
Bank Name and Address

**TEXAS A&M UNIVERSITY  
COLLEGE OF BUSINESS ADMINISTRATION  
AND GRADUATE SCHOOL OF BUSINESS  
COLLEGE STATION, TX 77843-4218  
409-845-3514 (FAX) 409-845-3884**

Dear President:

Please find enclosed a survey on the effects of bank mergers and acquisitions on small business lending in the United States. This survey is part of a research grant funded by the U.S. Small Business Administration and has been approved by the Office of Management and Budget (OMB No. 3245-0310). Its main purpose is to assess the potential impact of the Riegle-McNeal Interstate Banking and Branching Efficiency Act of 1994 on small business firms.

According to our records, your bank was involved in a merger or acquisition in the second half of 1993. It is important for us to collect first-hand information from you or your staff on how this structural change in your organization affected small business lending practices at your bank.

To save time, we have already obtained other pertinent information on your bank from the Federal Reserve System (the Call Report data base). Our analyses require the use of the information we have obtained from the Federal Reserve along with the information we obtain from you. For this purpose, your bank code has been entered on the first page of the survey. Please be assured, however, that all responses will be kept strictly confidential.

A summary of results based on the averaged responses from all respondents can be obtained by providing a return name and address on the last page of the survey.

We urge you or your staff to take a few minutes to fill out the survey and either return it to us in the (postage paid) return envelope or fax it to the number shown below.

Thank you for your assistance.

Sincerely,

Professors James W. Kolari and Asghar Zardkoohi

**Survey on the Effects of Bank Mergers and Acquisitions on  
 Small Business Lending in the United States**

**A. Your bank was involved in a merger or acquisition in the last three years. In your opinion what were the reasons for the merger or acquisition, as well as later results after the change? Please indicate the level of importance of the following goals or objectives by rating them from 1 (unimportant) to 10 (extremely important) before and after this change in your organization.**

	<u>Motivations Before Change</u>	<u>Results After Change</u>
Market share	_____	_____
Gain entry into a new bank market	_____	_____
Operating efficiency	_____	_____
Profitability	_____	_____
Risk management	_____	_____
Geographic diversification of assets	_____	_____
Array of financial services	_____	_____
Other goals and results not listed above:		
1) _____	_____	_____
2) _____	_____	_____

**B. How did your recent merger or acquisition affect your asset portfolio? Please indicate whether the bank's holdings of different types of loans and securities increased or decreased as a percentage of total assets?**

	<u>Increased</u>	<u>No Effect</u>	<u>Decreased</u>
Business loans:			
Small business loans (<\$250,000)	()	()	()
Medium business loans (\$250,000-\$1 million)	()	()	()
Large business loans (>\$1 million)	()	()	()
Commercial real estate loans	()	()	()
Residential real estate loans	()	()	()
Consumer credit:			
Credit cards	()	()	()
Other consumer credit	()	()	()
Agricultural loans (including real estate)	()	()	()
Government securities (including munis)	()	()	()
Other securities	()	()	()

**C. How did the merger or acquisition in the last three years affect your credit decision process for small business lending? Please indicate the level of importance by rating each of the following from 1 (unimportant) to 10 (extremely important) before and after this change in your organization.**

	<u>Importance Before Change</u>	<u>Importance After Change</u>
Cash flow of borrowing firm	_____	_____
Financial ratios of borrowing firm	_____	_____
Collateral	_____	_____
Appraisals of borrower's assets	_____	_____
Documentation requirements	_____	_____
Managerial expertise	_____	_____
Character of managers	_____	_____
Credit scoring models	_____	_____
Centralized credit review	_____	_____
Personal relationship between the firm and the bank	_____	_____

**D. Below are listed a number of aspects of your small business loans. How has the recent merger or acquisition affected each aspect of your small business loans.**

	<u>Increased</u>	<u>No Change</u>	<u>Decreased</u>
Profitability/or profit margin	()	()	()
Risk of default	()	()	()
Dollar amount of small business loans			
as a proportion of total business loans	()	()	()
Number of small business loans			
as a proportion of total business loans	()	()	()
Average loan size of small business loans	()	()	()
Interest rates charged on loans	()	()	()
Loan fees charged to borrowers	()	()	()
Approval rate of loan applications	()	()	()
Retention of old customers	()	()	()
Promotion of small business loans (or marketing)	()	()	()
Time it takes to process a small business loan application	()	()	()

**Continuation of Question D**

	Increased	No Change	Decreased
Offering of related services to small business	( )	( )	( )
Offering of new small business loan programs	( )	( )	( )
Costs of processing small business loan applications	( )	( )	( )

**E. Ownership and Management**

**1. Ownership and control of the bank:**

- (a) Are common shares of your bank traded publicly?      yes ( )    no ( )
- (b) Is your bank family owned or controlled?            yes ( )    no ( )
- (c) How many directors serve on the board?                          \_\_\_\_\_
- (d) How many are outside directors?                                      \_\_\_\_\_
- (e) How many directors own shares of the bank?                              \_\_\_\_\_
- (f) What percentage of outstanding common stock do the officers and directors own? \_\_\_\_\_

**2. How are decisions and operations managed in your bank ?**

- (a) What proportion of loan officers have local roots (that is, grew up in the community)?
- (b) Do loan officers have the power to make loan decisions on their own?      yes ( ) no ( )
- If so, what is the maximum loan size that can be made independently by loan officers? \_\_\_\_\_
- (c) Are loan officers routinely rotated to different offices in the organization?      yes ( ) no ( )
- (d) Are branch offices considered as profit centers that are evaluated individually?    yes ( ) no ( )
- (e) Are most accounting and computer operations of your bank in one location?    yes ( ) no ( )

- 3. This is addressed to the official who is completing the survey. At the time of the merger, were you employed by the acquiring bank or the target bank?  
 Acquiring       Target

**Continuation of Question E**

4. We would appreciate any other comments that you may have regarding the effects of your recent merger or acquisition on the small business lending activities.

**Survey Follow Up for Participants**

Thank you for your assistance in completing this questionnaire. If you enter your name and address below, we will be pleased to send you a complimentary copy of the results of the survey:

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**Please mail or fax to:**  
 James W. Kolari and Asghar Zardkoobi  
 Texas A&M University  
 College of Business Administration  
 Finance Department  
 College Station, TX 77843  
 Fax: 409-845-3884

**PLEASE NOTE:** The estimated burden for completing this form is 30 minutes per response. You will not be required to respond to this information if a valid OMB approval number is not displayed. If you have questions or comments concerning this estimate or other aspects of this information collection, please contact the US Small Business Administration, Chief, Administrative Information Branch, Washington, D. C. 20416 and/or Office of Management and Budget, Clearance Officer, Paperwork Reduction Project (3245-0310), Washington, D. C. 20503.

**Table 1**  
**Dollar Amount of Business Loans for Different Loan Size Ranges at**  
**Insured U.S. Commercial Banks: June 1994**  
**(\$billions)**

Total Assets	Loan Sizes <\$100,000	Loan Sizes <\$250,000	Loan Sizes <\$1 million	Loan Sizes >\$1 million	N
<\$100 million	31.532	39.988	52.949	2.700	7,449
\$100-\$300 million	24.020	36.336	61.631	12.363	2,113
\$300 mil.-\$1 billion	12.370	21.669	43.916	27.144	616
\$1-\$5 billion	11.178	21.385	48.111	74.116	245
\$5-\$20 billion	12.826	24.796	58.605	156.778	95
>\$20 billion	5.658	11.152	28.463	160.684	24
All Banks	97.586	155.328	293.678	433.788	10,542

**Table 2**  
**Dollar Amount of Business Loans for Different Loan Size Ranges at**  
**Insured U.S. Commercial Banks: June 1995**  
**(\$billions)**

Total Assets	Loan Sizes <\$100,000	Loan Sizes <\$250,000	Loan Sizes <\$1 million	Loan Sizes >\$1 million	N
<100 million	29.924	38.516	51.692	2.319	6,888
\$100-\$300 million	24.059	36.918	63.877	13.085	2,107
\$300 mil.-\$1 billion	12.448	22.562	46.329	25.879	622
\$1-\$5 billion	11.905	22.621	50.788	72.346	244
\$5-\$20 billion	14.626	28.504	66.265	186.624	104
>\$20 billion	7.347	14.537	36.326	189.644	26
All Banks	100.311	163.662	315.279	489.899	9,991

**Table 3**  
**Dollar Amount of Business Loans for Different Loan Size Ranges at**  
**Insured U.S. Commercial Banks: June 1996**  
**(\$billions)**

Total Assets	Loan Sizes <\$100,000	Loan Sizes <\$250,000	Loan Sizes <\$1 million	Loan Sizes >\$1 million	N
<\$100 million	28.362	36.626	49.749	2.681	6,465
\$100-\$300 million	24.660	38.352	66.135	14.555	2,176
\$300 mil.-\$1 billion	13.495	23.720	47.759	24.987	632
\$1-\$5 billion	12.765	24.836	56.360	73.783	266
\$5-\$20 billion	14.272	27.142	61.307	156.297	101
>20 billion	11.632	21.642	51.732	242.756	30
All Banks	105.187	172.319	333.042	515.060	9,670

Table 4

Business Loans/Total Assets Ratios for Different Loan Size Ranges at Insured U.S. Commercial Banks: June 1994

Assets	Loan Sizes <\$100,000	Loan Sizes <\$250,000	Loan Sizes <\$1 million	Loan Sizes >\$1 million	N
Less than \$1 million	0.099	0.121	0.152	0.006	7,449
\$1 million to \$10 million	0.073	0.108	0.179	0.032	2,113
\$10 million to \$1 billion	0.042	0.073	0.146	0.080	616
\$1 billion to \$10 billion	0.023	0.044	0.096	0.131	245
\$10 billion to \$50 billion	0.016	0.030	0.069	0.172	95
\$50 billion to \$100 billion	0.007	0.015	0.038	0.188	24
All insured	0.088	0.113	0.155	0.020	10,542

Table 5

Business Loans/Total Assets Ratios for Different Business Size Ranges at Insured U.S. Commercial Banks: June 1995

Assets	Loan Sizes <\$100,000	Loan Sizes <\$250,000	Loan Sizes <\$1 million	Loan Sizes >\$1 million	N
Less than \$1 million	0.100	0.123	0.156	0.005	6,888
\$1 million to \$10 million	0.074	0.110	0.186	0.033	2,107
\$10 million to \$1 billion	0.042	0.075	0.153	0.076	622
\$1 billion to \$10 billion	0.015	0.046	0.103	0.135	244
\$10 billion to \$50 billion	0.008	0.029	0.067	0.181	104
\$50 billion to \$100 billion	0.007	0.016	0.041	0.199	26
All insured	0.088	0.114	0.160	0.021	9,991

Table 6

Business Loans/Total Assets Ratios for Different Business Size Ranges at Insured U.S. Commercial Banks: June 1996

Assets	Loan Sizes <\$100,000	Loan Sizes <\$250,000	Loan Sizes <\$1 million	Loan Sizes >\$1 million	N
Less than \$1 million	0.098	0.123	0.157	0.006	6,465
\$1 million to \$10 million	0.072	0.110	0.187	0.036	2,176
\$10 million to \$1 billion	0.044	0.077	0.155	0.076	632
\$1 billion to \$10 billion	0.024	0.046	0.104	0.128	266
\$10 billion to \$50 billion	0.016	0.030	0.067	0.157	101
\$50 billion to \$100 billion	0.010	0.019	0.046	0.206	30
All insured	0.086	0.113	0.161	0.023	9,670



**Table 7**  
**Business Loans for Different Loan Size Ranges As a Ratio of**  
**Total Business Loans at Insured U.S. Commercial Banks: June 1994**

Total Assets	Loan Sizes <\$100,000	Loan Sizes <\$250,000	Loan Sizes <\$1 million	Loan Sizes >\$1 million	N
<\$100 million	0.744	0.849	0.976	0.024	7,449
\$100-\$300 million	0.413	0.573	0.876	0.124	2,113
\$300 mil.-\$1 billion	0.210	0.348	0.662	0.338	616
\$1-\$5 billion	0.123	0.222	0.462	0.538	245
\$5-\$20 billion	0.094	0.158	0.329	0.671	95
>\$20 billion	0.031	0.062	0.161	0.839	24
All Banks	0.625	0.742	0.918	0.082	10,542

**Table 8**  
**Business Loans for Different Loan Size Ranges As a Ratio of**  
**Total Business Loans at Insured U.S. Commercial Banks: June 1995**

Total Assets	Loan Sizes <\$100,000	Loan Sizes <\$250,000	Loan Sizes <\$1 million	Loan Sizes >\$1 million	N
<\$100 million	0.726	0.840	0.978	0.022	6,888
\$100-\$300 million	0.399	0.561	0.874	0.126	2,107
\$300 mil.-\$1 billion	0.201	0.349	0.680	0.320	622
\$1-\$5 billion	0.119	0.221	0.470	0.530	244
\$5-\$20 billion	0.119	0.188	0.342	0.658	104
>\$20 billion	0.031	0.064	0.165	0.835	26
All Banks	0.601	0.727	0.916	0.084	9,991

**Table 9**  
**Business Loans for Different Loan Size Ranges As a Ratio of**  
**Total Business Loans at Insured U.S. Commercial Banks: June 1996**

Total Assets	Loan Sizes <\$100,000	Loan Sizes <\$250,000	Loan Sizes <\$1 million	Loan Sizes >\$1 million	N
<\$100 million	0.711	0.827	0.973	0.027	6,409
\$100-\$300 million	0.385	0.552	0.861	0.139	2,151
\$300 mil.-\$1 billion	0.212	0.358	0.686	0.314	619
\$1-\$5 billion	0.117	0.221	0.481	0.519	252
\$5-\$20 billion	0.157	0.227	0.390	0.610	96
>\$20 billion	0.038	0.073	0.175	0.825	30
All Banks	0.582	0.710	0.908	0.092	9,557

**Small Business Lending by  
Bank Holding Company Affiliated and Independent Banks  
in Urban Versus Rural Regions: June 1993**  
(Loans <\$250,000)

**A. Dollar Amount of Loans (\$billions)**

By Bank Size in Assets	Rural		Urban		All Affil.		Rural		Urban		All Indep.	
	Affil.	N	Affil.	N	Affil.	N	Affil.	N	Affil.	N	Affil.	N
<\$100 million	18.4	3,662	13.1	1,742	31.5	5,404	5.1	1,408	7.8	1,150	12.9	2,558
\$100-\$300 million	14.4	733	20.0	945	34.4	1,678	2.1	128	5.4	277	7.6	405
\$300 mil.-\$1 billion	4.1	84	19.8	457	23.9	541	0.4	7	1.8	54	2.2	61
\$1-\$5 billion	1.3	7	23.1	235	24.4	242	NA	0	0.2	4	0.2	4
\$5-\$20 billion	0.5	1	28.2	89	28.7	90	NA	0	NA	0	NA	0
>\$20 billion	NA	0	9.6	19	9.6	19	NA	0	NA	0	NA	0
All Banks	38.7	4,487	113.8	3,487	152.5	7,974	7.6	1,543	15.2	1,485	22.8	3,028

**B. Small Business Loans/Total Assets (in percent)**

By Bank Size in Assets	Rural		Urban		All Affil.		Rural		Urban		All Indep.	
	Affil.	N	Affil.	N	Affil.	N	Affil.	N	Affil.	N	Affil.	N
<\$100 million	11.5	3,662	14.9	1,742	12.6	5,404	10.0	1,408	16.0	1,150	12.7	2,558
\$100-\$300 million	12.9	733	12.3	945	12.5	1,678	11.6	128	12.6	277	12.3	405
\$300 mil.-\$1 billion	11.4	84	8.8	457	9.2	541	12.8	7	6.7	54	7.5	61
\$1-\$5 billion	7.3	7	4.8	235	4.9	242	NA	0	3.6	4	3.6	4
\$5-\$20 billion	7.3	1	3.7	89	3.7	90	NA	0	NA	0	NA	0
>\$20 billion	NA	0	1.6	19	1.6	19	NA	0	NA	0	NA	0
All Banks	11.7	4,487	12.4	3,487	12.0	7,974	10.1	1,543	15.0	1,485	12.5	3,028

**Small Business Lending by  
Bank Holding Company Affiliated and Independent Banks  
in Urban Versus Rural Regions: June 1994**

(Loans <\$250,000)

**A. Dollar Amount of Loans (\$billions)**

By Bank Size in Assets	Rural		Urban		All Affil.		Rural		Urban		All Indep.	
	Affil.	N	Affil.	N	Affil.	N	Affil.	N	Affil.	N	Affil.	N
<\$100 million	18.0	3,579	10.7	1,544	28.7	5,123	4.7	1,283	6.6	1,043	11.3	2,326
\$100-\$300 million	13.8	785	16.1	929	29.9	1,714	1.8	120	4.7	279	6.5	399
\$300 mil.-\$1 billion	3.7	97	16.0	459	19.7	556	0.3	8	1.7	52	2.0	60
\$1-\$5 billion	1.4	9	19.6	229	21.1	238	NA	0	0.3	7	0.3	7
\$5-\$20 billion	0.9	2	23.9	93	24.8	95	NA	0	NA	0	NA	0
>\$20 billion	NA	0	11.1	24	11.1	24	NA	0	NA	0	NA	0
<b>All Banks</b>	<b>37.8</b>	<b>4,472</b>	<b>97.4</b>	<b>3,278</b>	<b>135.3</b>	<b>7,750</b>	<b>6.8</b>	<b>1,411</b>	<b>13.2</b>	<b>1,381</b>	<b>20.0</b>	<b>2,792</b>

**B. Small Business Loans/Total Assets (in percent)**

By Bank Size in Assets	Rural		Urban		All Affil.		Rural		Urban		All Indep.	
	Affil.	N	Affil.	N	Affil.	N	Affil.	N	Affil.	N	Affil.	N
<\$100 million	11.4	3,579	13.8	1,544	12.1	5,123	10.0	1,283	14.7	1,043	12.1	2,326
\$100-\$300 million	11.6	785	10.2	929	10.8	1,714	10.0	120	10.9	279	10.6	399
\$300 mil.-\$1 billion	8.7	97	7.0	459	7.3	556	9.8	8	6.4	52	6.8	60
\$1-\$5 billion	8.0	9	4.3	229	4.4	238	NA	0	2.9	7	2.9	7
\$5-\$20 billion	6.6	2	2.9	93	2.9	95	NA	0	NA	0	NA	0
>\$20 billion	NA	0	1.5	24	1.4	24	NA	0	NA	0	NA	0
<b>All Banks</b>	<b>11.4</b>	<b>4,472</b>	<b>10.8</b>	<b>3,278</b>	<b>11.1</b>	<b>7,750</b>	<b>10.0</b>	<b>1,411</b>	<b>13.6</b>	<b>1,381</b>	<b>11.8</b>	<b>2,792</b>

**Small Business Lending by  
Bank Holding Company Affiliated and Independent Banks  
in Urban Versus Rural Regions: June 1995**  
(Loans <\$250,000)

**A. Dollar Amount of Loans (\$billions)**

By Bank Size in Assets	Rural		Urban		All Affil.		Rural		Urban		All	
	Affil.	N	Affil.	N	Affil.	N	Affil.	N	Affil.	N	Affil.	N
<\$100 million	17.9	3,422	10.6	1,446	28.5	4,868	4.4	1,131	5.6	889	10.0	2,020
\$100-\$300 million	14.2	792	16.4	933	30.5	1,725	1.8	115	4.6	267	6.4	382
\$300 mil.-\$1 billion	4.1	102	16.3	461	20.4	563	0.3	9	1.8	50	2.2	59
\$1-\$5 billion	1.7	12	20.5	223	22.2	235	NA	0	0.4	9	0.4	9
\$5-\$20 billion	0.9	1	27.6	103	28.5	104	NA	0	NA	0	NA	0
>\$20 billion	NA	0	14.5	26	14.5	26	NA	0	NA	0	NA	0
All Banks	38.8	4,329	105.9	3,192	144.7	7,521	6.5	1,255	12.4	1,215	18.9	2,470

**B. Small Business Loans/Total Assets (in percent)**

By Bank Size in Assets	Rural		Urban		All Affil.		Rural		Urban		All	
	Affil.	N	Affil.	N	Affil.	N	Affil.	N	Affil.	N	Affil.	N
<\$100 million	11.8	3,422	14.1	1,446	12.5	4,868	10.3	1,131	14.2	889	12.0	2,020
\$100-\$300 million	11.8	792	10.5	933	11.1	1,725	10.1	115	11.2	267	10.9	382
\$300 mil.-\$1 billion	9.7	102	7.0	461	7.5	563	9.1	9	7.4	50	7.7	59
\$1-\$5 billion	8.3	12	4.5	223	4.7	235	NA	0	3.0	9	3.0	9
\$5-\$20 billion	6.0	1	2.9	103	2.9	104	NA	0	NA	0	NA	0
>\$20 billion	NA	0	1.6	26	1.6	26	NA	0	NA	0	NA	0
All Banks	11.7	4,329	10.9	3,192	11.4	7,521	10.3	1,255	13.2	1,215	11.7	2,470

**Table 13**  
**T Tests for Mean Differences in the Ratio of**  
**Small Business Loans Less Than \$250,000/Total Assets**  
**Between Bank Holding Company Affiliated and Independent Banks in Urban Versus**  
**Rural Regions: June 1993-June 1995<sup>a</sup>**

Bank Size in Assets	1993		1994		1995	
	Urban	Rural	Urban	Rural	Urban	Rural
<\$100 million	-2.85***	6.96***	-2.74***	6.55***	-0.39	6.21***
\$100-\$300 million	-0.47	1.64	-1.56	3.06***	-1.61	2.98***
\$300 mil.-\$1 billion	2.14**	NA	0.94	NA	-0.47	NA
\$1-\$5 billion	NA	NA	NA	NA	NA	NA
\$5-\$20 billion	NA	NA	NA	NA	NA	NA
>\$20 billion	NA	NA	NA	NA	NA	NA
All Banks	-8.52***	7.60***	-10.46***	6.94***	-8.70***	6.62***

<sup>a</sup>Asterisks correspond to the following levels of significance: \*\*\* -- .01, \*\* -- .05, and \* -- .10.

**Table 14**  
**Regression Analyses of the Relationship Between the**  
**Small Business Loans/Total Assets Ratio for**  
**Commercial Banks in Holding Companies Versus Independent Banks: 1993-1995<sup>a</sup>**

**A. Small Business Loans Less Than \$100,000**

Year	Intercept	Holding Company	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	0.86	0.08	-0.27	0.81	733.54***	16.65
n=11,002	(10.34***)	(4.15***)	(-37.41***)	(32.92***)		
1994	1.27	0.11	-0.32	0.74	957.66***	21.40
n=10,542	(15.99***)	(5.54***)	(-47.14***)	(30.38***)		
1995	1.30	0.10	-0.33	0.76	1003.12***	23.13
n=9,991	(16.64***)	(5.24***)	(-58.56***)	(31.64***)		

**B. Small Business Loans Less Than \$250,000**

Year	Intercept	Holding Company	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	-0.51	0.02	-0.15	0.98	866.76***	19.10
n=11,002	(-0.74)	(1.37)	(-24.29***)	(47.48***)		
1994	0.17	0.03	-0.18	0.89	849.40***	19.45
n=10,542	(2.55**)	(1.82*)	(-30.88***)	(43.01***)		
1995	0.27	0.02	-0.19	0.86	844.64***	20.21
n=9,991	(4.04***)	(1.47)	(-33.34***)	(41.74***)		

**C. Small Business Loans Less Than \$1 Million**

Year	Intercept	Holding Company	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	-1.47	-0.02	0.01	1.09	1118.35***	23.35
n=11,002	(-22.78***)	(-1.31)	(1.80*)	(56.92***)		
1994	-1.37	-0.03	-0.004	1.02	868.02***	19.79
n=10,542	(-20.86***)	(-1.87*)	(-0.71)	(50.66***)		
1995	-1.31	-0.03	-0.01	0.95	750.67***	18.38
n=9,991	(-19.89***)	(-1.79*)	(-2.26**)	(47.11***)		

**D. Large Business Loans More Than \$1 Million**

Year	Intercept	Holding Company	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	3.73	-0.01	-0.46	-0.32	319.61***	8.00
n=10,990	(20.24***)	(-0.28)	(-28.45***)	(-5.85***)		
1994	4.12	0.03	-0.52	-0.30	317.89***	8.29
n=10,512	(20.31***)	(0.64)	(-29.15***)	(-4.79***)		
1995	4.01	-0.03	-0.51	-0.18	276.43***	7.66
n=9,959	(18.65***)	(-0.55)	(-27.24***)	(-2.78***)		

<sup>a</sup>Estimates of parameter coefficients (and associated t statistics) are shown. Holding Company is a dummy variable defined as 1 if the bank is a member of a holding company and 0 if it is an independent bank. Coefficients of continuous variables are elasticities of these variables with respect to changes in the small business loan ratio. Asterisks correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

Table 14, continued<sup>a</sup>**E. Small Business Loans Between \$100,000 and \$250,000**

Year	Intercept	Holding Company	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	5.74	0.04	-0.66	-0.16	1045.66***	22.17
n=11,002	(40.85***)	(1.37)	(-53.75***)	(-3.76***)		
1994	6.35	0.10	-0.74	-0.18	1328.88***	27.43
n=10,542	(45.77***)	(3.04***)	(-61.22***)	(-4.27***)		
1995	6.01	0.07	-0.71	-0.03	1189.46***	26.30
n=9,991	(42.71***)	(1.99**)	(-58.20***)	(-0.73***)		

**F. Small Business Loans Between \$250,000 and \$1,000,000**

Year	Intercept	Holding Company	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	4.39	0.02	-0.51	-0.16	764.67***	17.24
n=11,002	(34.09***)	(0.67)	(-45.66***)	(-4.14***)		
1994	4.78	0.07	-0.57	-0.11	931.12***	20.93
n=10,542	(37.85***)	(2.13**)	(-51.30***)	(-2.87***)		
1995	4.41	0.02	-0.53	-0.03	799.25***	19.34
n=9,991	(34.12***)	(0.54)	(-47.49***)	(-0.69)		

<sup>a</sup>Estimates of parameter coefficients (and associated t statistics) are shown. Holding Company is a dummy variable defined as 1 if the bank is a member of a holding company and 0 if it is an independent bank. Coefficients of continuous variables are elasticities of these variables with respect to changes in the small business loan ratio. Asterisks correspond to the following levels of significance: \*\*\* -- .01, \*\* -- .05, and \* -- .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

Table 15  
 Further Regression Analyses of the Relationship Between the  
 Small Business Loans/Total Assets Ratio and  
 Commercial Banks in Holding Companies Versus Independent Banks: 1993-1995\*

**A. Small Business Loans Less Than \$100,000**

Year	Intercept	Holding Company	Log (Assets)	Log (Loan /Assets)	State Employees	Overall F	Adj. R <sup>2</sup>
1993	0.93	0.08	-0.27	0.81	-0.01	550.20***	16.65
n=11002	(6.22***)	(3.97***)	(-36.63***)	(32.90***)	(-0.57)		
1994	1.65	0.10	-0.32	0.73	-0.03	721.25***	21.46
n=10542	(11.42***)	(4.86***)	(-45.57***)	(30.01***)	(-3.11***)		
1995	1.65	0.09	-0.33	0.76	-0.03	755.02***	23.19
n=9991	(11.56***)	(4.61***)	(-47.03***)	(31.24***)	(-2.91***)		

**B. Small Business Loans Less Than \$250,000**

Year	Intercept	Holding Company	Log (Assets)	Log (Loan /Assets)	State Employees	Overall F	Adj. R <sup>2</sup>
1993	-0.69	0.04	-0.16	0.98	0.06	662.58***	19.39
n=11002	(-5.66***)	(2.47**)	(-25.50***)	(47.65***)	(6.38***)		
1994	-0.44	0.05	-0.19	0.90	0.05	649.19***	19.74
n=10542	(-3.71***)	(2.91***)	(-31.56***)	(43.39***)	(6.27***)		
1995	-0.35	0.04	-0.20	0.87	0.05	645.93***	20.52
n=9991	(-2.94***)	(2.56**)	(-34.00***)	(42.21***)	(6.32**)		

**C. Small Business Loans Less Than \$1,000,000**

Year	Intercept	Holding Company	Log (Assets)	Log (Loan /Assets)	State Employees	Overall F	Adj. R <sup>2</sup>
1993	-2.67	0.02	-0.01	1.09	0.11	903.03***	24.70
n=11002	(-25.00***)	(1.08)	(-0.94)	(57.52***)	(14.04***)		
1994	-2.75	0.01	-0.02	1.04	0.12	726.73***	21.59
n=10542	(-25.10***)	(0.85)	(-3.77***)	(52.05***)	(15.59***)		
1995	-2.68	0.01	-0.03	0.98	0.12	636.56***	20.29
n=9991	(-24.41***)	(0.86)	(-5.26***)	(48.75***)	(15.5***)		

**D. Small Business Loans Greater Than \$1,000,000**

Year	Intercept	Holding Company	Log (Assets)	Log (Loan /Assets)	State Employees	Overall F	Adj. R <sup>2</sup>
1993	5.10	-0.06	-0.44	-0.32	-0.11	248.12***	8.25
n=10990	(16.62***)	(-1.25)	(-26.81***)	(-5.95***)	(-5.57***)		
1994	5.50	-0.01	-0.50	-0.32	-0.11	245.31***	8.51
n=10512	(16.19***)	(-0.25)	(-27.56***)	(-5.12***)	(-5.04***)		
1995	5.59	-0.08	-0.49	-0.22	-0.13	215.20***	7.92
n=9959	(15.43***)	(-1.48)	(-25.62***)	(-3.25***)	(-5.40***)		

\*Estimates of parameter coefficients (and associated t statistics) are shown. Holding Company is a dummy variable defined as 1 if the bank is a member of a holding company and 0 if it is an independent bank. State Employees is defined as the number of employees in the bank's state that work in firms with the following ranges of employees: panel A - <20 employees, panel B - <99 employees, panel C - <499 employees, panel D - >500 employees, panel E - 20-99 employees, and panel F - 100-499 employees. Asterisks correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.



Table 15, continued<sup>a</sup>

## E. Small Business Loans Between \$100,000 to \$250,000

Year	Intercept	Holding Company	Log (Assets)	Log (Loan /Assets)	State Employees	Overall F	Adj. R <sup>2</sup>
1993	7.41	-0.003	-0.64	-0.16	-0.14	805.95***	22.64
n=11002	(30.15***)	(-0.08)	(-51.41***)	(-3.89***)	(-8.23***)		
1994	8.33	0.04	-0.72	-0.21	-0.17	1030.26***	28.09
n=10542	(34.26***)	(1.25)	(-58.48***)	(-4.91***)	(-9.88***)		
1995	7.53	0.02	-0.69	-0.06	-0.13	910.70***	26.70
n=9991	(30.28***)	(0.66)	(-55.91***)	(-1.35)	(-7.42***)		

## F. Small Business Loans Between \$250,000 to \$1 Million

Year	Intercept	Holding Company	Log (Assets)	Log (Loan /Assets)	State Employees	Overall F	Adj. R <sup>2</sup>
1993	5.13	-0.002	-0.50	-0.16	-0.07	579.05***	17.37
n=11002	(23.87***)	(-0.07)	(-43.99***)	(-4.17***)	(-4.31***)		
1994	5.82	0.03	-0.55	-0.12	-0.09	709.86***	21.20
n=10542	(27.46***)	(1.05)	(-49.20***)	(-3.21***)	(-6.05***)		
1995	5.20	-0.01	-0.52	-0.04	-0.07	605.73***	19.49
n=9991	(23.86***)	(-0.25)	(-45.75***)	(-1.05)	(-4.53**)		

<sup>a</sup>Estimates of parameter coefficients (and associated t statistics) are shown. Holding Company is a dummy variable defined as 1 if the bank is a member of a holding company and 0 if it is an independent bank. State Employees is defined as the number of employees in the bank's state that work in firms with the following ranges of employees: panel A - <20 employees, panel B - <99 employees, panel C - <499 employees, panel D - >500 employees, panel E - 20-99 employees, and panel F - 100-499 employees. Asterisks correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

Small Business Lending by Banks in Small Versus Large Bank Holding Companies  
in Urban Versus Rural Regions: June 1993<sup>a</sup>

A. Dollar Amount of Loans Less Than \$250,000 (\$billions)

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Small BHCs	N	Small BHCs	N	Small BHCs	N	Large BHCs	N	Large BHCs	N	Large BHCs	N
<\$100 million	16.7	3,407	11.7	1,529	28.4	4,936	1.7	255	1.4	213	3.1	468
\$100-\$300 million	10.4	520	15.1	689	25.5	1,209	4.0	213	4.9	256	8.9	469
\$300 mil.-\$1 billion	2.1	38	10.2	232	12.4	270	1.9	46	9.6	225	11.5	271
\$1-\$5 billion	NA	0	NA	0	NA	0	1.3	7	23.1	235	24.4	242
\$5-\$20 billion	NA	0	NA	0	NA	0	0.5	1	28.2	89	28.7	90
>\$20 billion	NA	0	NA	0	NA	0	NA	0	9.6	19	9.6	19
All Banks	29.3	3,965	37.0	2,450	66.3	6,415	9.4	522	76.8	1,037	86.2	1,559

B. Small Business Loans/Total Assets (in percent)

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Small BHCs	N	Small BHCs	N	Small BHCs	N	Large BHCs	N	Large BHCs	N	Large BHCs	N
<\$100 million	11.5	3,407	15.6	1,529	12.8	4,936	11.4	255	10.5	213	11.0	468
\$100-\$300 million	13.3	520	13.1	689	13.2	1,209	11.8	213	10.1	256	10.9	469
\$300 mil.-\$1 billion	14.0	38	9.6	232	10.2	270	9.2	46	7.9	225	8.1	271
\$1-\$5 billion	NA	0	NA	0	NA	0	7.3	7	4.8	235	4.9	242
\$5-\$20 billion	NA	0	NA	0	NA	0	7.3	1	3.7	89	3.7	90
>\$20 billion	NA	0	NA	0	NA	0	NA	0	1.6	19	1.6	19
All Banks	11.8	3,965	12.2	2,450	12.7	6,415	11.3	522	7.8	1,037	9.0	1,559

<sup>a</sup>Small (large) BHCs have less (more) than \$1 billion in total assets. Urban versus rural location of bank holding companies was determined by the location of the parent or lead bank in the organization.

**Small Business Lending by Banks in Small Versus Large Bank Holding Companies  
in Urban Versus Rural Regions: June 1994<sup>a</sup>**

**A. Dollar Amount of Loans Less Than \$250,000 (\$billions)**

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Small BHCs	N	Small BHCs	N	Small BHCs	N	Large BHCs	N	Large BHCs	N	Large BHCs	N
<\$100 million	16.3	3,327	9.8	1,385	2.6	4,712	1.7	252	0.9	159	2.6	411
\$100-\$300 million	10.4	566	12.3	679	2.3	1,245	3.5	219	3.8	250	7.3	469
\$300 mil.-\$1 billion	1.8	41	8.2	232	1.0	273	1.9	56	7.8	227	9.7	283
\$1-\$5 billion	NA	0	NA	0	NA	0	1.4	9	19.6	229	21.1	238
\$5-\$20 billion	NA	0	NA	0	NA	0	0.9	2	23.9	93	24.8	95
>\$20 billion	NA	0	NA	0	NA	0	NA	0	11.2	24	11.1	24
All Banks	28.5	3,934	30.2	2,296	5.9	6,230	9.3	538	67.2	982	76.6	1,520

**B. Small Business Loans/Total Assets (in percent)**

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Small BHCs	N	Small BHCs	N	Small BHCs	N	Large BHCs	N	Large BHCs	N	Large BHCs	N
<\$100 million	11.5	3,327	14.2	1,385	12.3	4,712	11.0	252	10.0	159	10.6	411
\$100-\$300 million	12.2	566	10.8	679	11.5	1,245	10.0	219	8.4	250	9.2	469
\$300 mil.-\$1 billion	9.9	41	7.5	232	7.9	273	7.8	56	6.5	227	6.7	283
\$1-\$5 billion	NA	0	NA	0	NA	0	8.0	9	4.3	229	4.4	238
\$5-\$20 billion	NA	0	NA	0	NA	0	6.6	2	2.9	93	3.0	95
>\$20 billion	NA	0	NA	0	NA	0	NA	0	1.5	24	1.5	24
All Banks	12.5	3,934	12.6	2,296	11.9	6,230	10.2	538	6.6	982	7.8	1,520

<sup>a</sup>Small (large) BHCs have less (more) than \$1 billion in total assets. Urban versus rural location of bank holding companies was determined by the location of the parent or lead bank in the organization.

**A. Dollar Amount of Loans Less Than \$250,000 (\$billions)**

Total Assets	Rural		Urban		All		Rural		Urban		All	
	BHCs	N	Small BHCs	N	Small BHCs	N	Large BHCs	N	Large BHCs	N	Large BHCs	N
<\$100 million	16.6	3,220	9.8	1,311	26.5	4,531	1.3	202	0.8	135	2.1	337
\$100-\$300 million	10.8	577	12.7	699	23.5	1,276	3.4	215	3.7	234	7.1	449
\$300 mil.-\$1 billion	2.4	53	9.0	235	11.4	288	1.7	49	7.3	226	9.0	275
\$1-\$5 billion	NA	0	NA	0	NA	0	1.7	12	20.5	222	22.2	235
\$5-\$20 billion	NA	0	NA	0	NA	0	0.9	1	27.6	103	28.5	104
>\$20 billion	NA	0	NA	0	NA	0	NA	NA	14.5	26	14.5	26
All Banks	29.8	3,850	31.6	2,245	61.4	6,095	9.1	479	74.3	947	83.4	1,426

**B. Small Business Loans/Total Assets (in percent)**

Total Assets	Rural		Urban		All		Rural		Urban		All	
	BHCs	N	Small BHCs	N	Small BHCs	N	Large BHCs	N	Large BHCs	N	Large BHCs	N
<\$100 million	11.9	3,220	14.6	1,311	12.6	4,531	10.3	202	9.3	135	9.8	337
\$100-\$300 million	12.6	577	11.1	699	11.7	1,276	9.7	215	8.7	234	9.2	449
\$300 mil.-\$1 billion	11.0	53	7.9	235	8.5	288	8.2	49	6.1	226	6.5	275
\$1-\$5 billion	NA	0	NA	0	NA	0	8.3	12	4.5	222	4.7	235
\$5-\$20 billion	NA	0	NA	0	NA	0	6.0	1	2.9	103	2.9	104
>\$20 billion	NA	0	NA	0	NA	0	NA	NA	1.6	26	1.6	26
All Banks	12.0	3,850	12.8	2,245	12.3	6,095	9.7	479	6.3	947	7.5	1,426

\*Small (large) BHCs have less (more) than \$1 billion in total assets. Urban versus rural location of bank holding companies was determined by the location of the parent or lead bank in the organization.

**Table 19**  
**T Tests for Mean Differences in the Ratio of**  
**Small Business Loans Less Than \$250,000/Total Assets**  
**Between Banks in Small and Large BHCs in**  
**Urban and Rural Regions: June 1993-June 1995<sup>a</sup>**

Total Assets	1993		1994		1995	
	Urban	Rural	Urban	Rural	Urban	Rural
<\$100 million	-7.97***	-0.19	-7.31***	-1.27	-9.86***	-3.50***
\$100-\$300 million	-5.84***	-2.53**	-6.06***	-4.97***	-5.71***	-6.76***
\$300 mil.-\$1 billion	-2.64***	-3.05***	-2.36**	-1.99***	-4.54***	-2.74***
\$1-\$5 billion	NA	NA	NA	NA	NA	NA
\$5-\$20 billion	NA	NA	NA	NA	NA	NA
>\$20 billion	NA	NA	NA	NA	NA	NA
All Banks	-23.11***	-1.38	-26.00***	-5.12***	-29.4***	-7.98***

<sup>a</sup>Small (large) BHCs have less (more) than \$1 billion in total assets. Urban versus rural location of bank holding companies was determined by the location of the parent or lead bank in the organization.

Table 20

Small Business Lending by  
Branch Banks and Unit Banks in Urban Versus Rural Regions: June 1993

A. Dollar Amount of Loans Less Than \$250,000 (\$billions)

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Branch	N	Branch	N	Branch	N	Unit	N	Unit	N	Unit	N
<\$100 million	14.4	2,266	11.8	1,336	26.2	3,602	9.1	2,804	9.0	1,556	18.9	4,360
\$100-\$300 million	14.3	723	20.6	955	34.9	1,678	2.3	138	4.7	267	7.0	405
\$300 mil.-\$1 billion	4.1	79	18.1	414	22.1	493	0.4	12	3.5	97	3.9	109
\$1-\$5 billion	0.7	5	19.3	190	20.0	195	0.6	2	4.0	49	4.6	51
\$5-\$20 billion	0.5	1	26.2	83	26.7	84	NA	0	2.0	6	2.0	6
>\$20 billion	NA	0	9.6	19	9.6	19	NA	0	NA	0	NA	0
All Banks	33.9	3,074	105.7	2,997	139.6	6,071	12.4	2,956	23.3	1,975	35.8	4,931

B. Small Business Loans/Total Assets (in percent)

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Branch	N	Branch	N	Branch	N	Unit	N	Unit	N	Unit	N
<\$100 million	12.3	2,266	15.8	1,336	13.6	3,602	10.1	2,804	14.9	1,556	11.8	4,360
\$100-\$300 million	12.9	723	12.9	955	12.9	1,678	11.3	138	10.6	267	10.8	405
\$300 mil.-\$1 billion	12.1	79	8.8	414	9.3	493	7.5	12	7.6	97	7.6	109
\$1-\$5 billion	7.0	5	4.9	190	4.9	195	7.9	2	4.4	49	4.5	51
\$5-\$20 billion	7.3	1	3.6	83	3.7	84	NA	0	4.7	6	4.7	6
>\$20 billion	NA	0	1.6	19	1.6	19	NA	0	NA	0	NA	0
All Banks	12.4	3,074	12.8	2,997	12.6	6,071	10.2	2,956	13.7	1,975	11.6	4,931

**Table 21**  
**Small Business Lending by**  
**Branch Banks and Unit Banks in Urban Versus Rural Regions: June 1994**

**A. Dollar Amount of Loans Less Than \$250,000 (\$billions)**

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Branch	N	Branch	N	Branch	N	Unit	N	Unit	N	Unit	N
<\$100 million	14.2	2,260	10.5	1,314	24.7	3,574	8.5	2,602	6.8	1,273	15.3	3,875
\$100-\$300 million	14.1	787	18.2	1,022	32.2	1,809	1.6	118	2.5	186	4.1	304
\$300 mil.-\$1 billion	3.7	93	15.4	442	19.1	535	0.3	12	2.2	69	2.5	81
\$1-\$5 billion	1.1	7	18.0	203	19.1	210	0.3	2	2.0	33	2.2	35
\$5-\$20 billion	0.5	1	22.5	87	23.0	88	0.4	1	1.4	6	1.8	7
>\$20 billion	NA	0	11.2	24	11.2	24	NA	0	NA	0	NA	0
All Banks	33.7	3,148	95.7	3,092	129.4	6,240	11.0	2,735	15.0	1,567	26.0	4,302

**B. Small Business Loans/Total Assets (in percent)**

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Branch	N	Branch	N	Branch	N	Unit	N	Unit	N	Unit	N
<\$100 million	12.1	2,260	14.4	1,314	13.0	3,574	10.1	2,602	13.9	1,273	11.4	3,875
\$100-\$300 million	11.7	787	10.7	1,022	11.1	1,809	9.7	118	8.5	186	8.9	304
\$300 mil.-\$1 billion	9.1	93	6.9	442	7.3	535	6.5	12	7.0	69	6.9	81
\$1-\$5 billion	9.1	7	4.4	203	4.6	210	4.0	2	3.2	33	3.3	35
\$5-\$20 billion	6.2	1	2.9	87	3.0	88	6.9	1	2.3	6	3.0	7
>\$20 billion	NA	0	1.5	24	1.5	24	NA	0	NA	0	NA	0
All Banks	11.9	3,148	11.0	3,092	11.5	6,240	10.1	2,735	12.7	1,567	11.0	4,302

Table 22  
 Small Business Lending by  
 Branch Banks and Unit Banks in Urban Versus Rural Regions: June 1995

A. Dollar Amount of Loans Less Than \$250,000 (\$billions)

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Branch	N	Branch	N	Branch	N	Unit	N	Unit	N	Unit	N
<\$100 million	14.5	2,199	10.4	1,248	24.9	3,447	7.8	2,354	5.8	1,087	13.6	3,441
\$100-\$300 million	15.2	849	19.6	1,093	34.9	1,942	0.7	58	1.4	107	2.1	165
\$300 mil.-\$1 billion	4.4	110	17.7	490	22.1	600	0.0	1	0.4	21	0.4	22
\$1-\$5 billion	1.7	12	20.7	220	22.4	232	NA	0	0.2	12	0.2	12
\$5-\$20 billion	0.9	1	27.1	98	28.1	99	NA	0	0.4	5	0.4	5
>\$20 billion	NA	0	14.5	26	14.5	26	NA	0	NA	0	NA	0
All Banks	36.8	3,171	110.0	3,175	146.9	6,346	8.5	2,413	8.3	1,232	16.8	3,645

B. Small Business Loans/Total Assets (in percent)

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Branch	N	Branch	N	Branch	N	Unit	N	Unit	N	Unit	N
<\$100 million	12.5	2,199	14.5	1,248	13.2	3,447	10.4	2,354	13.7	1,087	11.5	3,441
\$100-\$300 million	11.7	849	10.8	1,093	11.2	1,942	9.5	58	8.8	107	9.1	165
\$300 mil.-\$1 billion	9.7	110	7.2	490	7.7	600	0.0	1	3.4	21	3.2	22
\$1-\$5 billion	8.3	12	4.6	220	4.8	232	NA	0	0.8	12	0.8	12
\$5-\$20 billion	6.0	1	3.0	98	3.0	99	NA	0	0.9	5	0.9	5
>\$20 billion	NA	0	1.6	26	1.6	26	NA	0	NA	0	NA	0
All Banks	12.1	3,171	11.0	3,175	11.5	6,346	10.4	2,413	13.0	1,232	11.3	3,645



**Table 23**  
**T Tests for Mean Differences in the Ratio of**  
**Small Business Loans Less Than \$250,000/Total Assets**  
**Between Branch Banks Versus Unit Banks in**  
**Urban and Rural Regions : June 1993-June 1995**

Total Assets	1993		1994		1995	
	Urban	Rural	Urban	Rural	Urban	Rural
<\$100 million	-2.85***	6.96***	-2.85***	6.96***	-2.85***	6.96***
\$100-\$300 million	-0.47	1.64	-0.47	1.64	-0.47	1.64
\$300 mil.-\$1 billion	2.14**	NA	2.14**	NA	2.14**	NA
\$1-\$5 billion	NA	NA	NA	NA	NA	NA
\$5-\$20 billion	NA	NA	NA	NA	NA	NA
>\$20 billion	NA	NA	NA	NA	NA	NA
All Banks	-8.52***	7.60***	-8.52***	7.60***	-8.52***	7.60***

Table 24  
Regression Analyses of the Relationship Between the  
Small Business Loans/Total Assets Ratio and  
Commercial Banks in Branch Banks Versus Unit Banks: 1993-1995<sup>a</sup>

**Small Business Loans Less Than \$100,000**

Year	Intercept	Branch	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1994	1.12	0.23	-0.30	0.79	787.43***	17.66
n=11,002	(13.11***)	(12.33***)	(-39.47***)	(32.21***)		
1993	1.54	0.23	-0.35	0.71	1009.63***	22.30
n=10,542	(18.83***)	(12.39***)	(-48.07***)	(29.71***)		
1995	1.66	0.27	-0.37	0.73	1073.73***	24.37
n=9,991	(20.36***)	(13.80***)	(-49.55***)	(30.74***)		

**Small Business Loans Less Than \$250,000**

Year	Intercept	Branch	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	0.16	0.19	-0.17	0.96	928.90***	20.19
n=11,002	(2.35**)	(12.35***)	(-27.96***)	(46.65***)		
1994	0.44	0.23	-0.21	0.86	932.05***	20.95
n=10,542	(6.32***)	(14.25***))	(-34.52***)	(42.01***)		
1995	0.62	0.27	-0.24	0.82	954.97***	22.27
n=9,991	(8.97***)	(16.31***)	(-37.77***)	(40.41***)		

**Small Business Loans Less Than \$1 Million**

Year	Intercept	Branch	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	-1.30	0.14	-0.01	1.06	1157.90***	23.98
n=11,002	(-19.72***)	(9.62***)	(-2.35**)	(56.03***)		
1994	-1.13	0.20	-0.04	0.98	936.08***	21.02
n=10,542	(-16.75***)	(12.93***)	(-6.48***)	(49.44***)		
1995	-0.96	0.27	-0.06	0.90	859.25***	20.49
n=9,991	(-14.14***)	(16.40***)	(-10.14***)	(45.48***)		

**Large Business Loans More Than \$1 Million**

Year	Intercept	Branch	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	3.74	0.01	-0.46	-0.32	319.59**	8.00
n=10,990	(19.64***)	(0.18)	(-26.85***)	(-5.88***)		
1994	3.87	-0.21	-0.47	-0.26	324.95***	8.46
n=10,512	(18.37***)	(-4.45***)	(-25.00***)	(-4.25***)		
1995	3.58	-0.33	-0.44	-0.14	289.73***	8.00
n=9,959	(15.87***)	(-6.09***)	(-21.69***)	(-2.10***)		

Estimates of parameter coefficients (and associated t statistics) are shown. Branch is a dummy variable defined as 1 if the bank operates branch offices and 0 if it has no branches. Coefficients of continuous variables are elasticities of these variables with respect to changes in the small business loan ratio. Asterisks correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

Table 24, continued<sup>a</sup>

## E Small Business Loans Between \$100,000 and \$250,000

Year	Intercept	Branch	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	5.91	0.16	-0.68	-0.17	1056.50***	22.35
n=11,002	(40.88***)	(5.21***)	(-52.35***)	(-4.14***)		
1994	6.44	0.08	-0.74	-0.17	1327.39***	27.40
n=10,542	(44.72***)	(2.45**)	(-57.12***)	(-4.24***)		
1995	6.01	0.004	-0.70	-0.02	1187.67***	26.27
n=9,991	(40.71***)	(0.12)	(-51.91***)	(-0.52***)		

## F Small Business Loans Between \$250,000 and \$1,000,000

Year	Intercept	Branch	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	4.44	0.05	-0.51	-0.16	765.65***	17.25
n=11,002	(33.43***)	(1.70*)	(-43.44***)	(-4.24***)		
1994	4.78	-0.003	-0.56	-0.10	929.20***	20.90
n=10,542	(36.40***)	(-0.13)	(-47.02***)	(-2.65***)		
1995	4.30	-0.08	-0.51	-0.01	801.58***	19.38
n=9,991	(31.72***)	(-2.43**)	(-41.36**)	(-0.33)		

<sup>a</sup>Estimates of parameter coefficients (and associated t statistics) are shown. Branch is a dummy variable defined as 1 if the bank operates branch offices and 0 if it has no branches. Coefficients of continuous variables are elasticities of these variables with respect to changes in the small business loan ratio. Asterisks correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

**Table 25**  
**Further Regression Analyses of the Relationship Between the**  
**Small Business Loans/Total Assets Ratio and**  
**Commercial Banks in Branch Banks Versus Unit Banks: 1993-1995\***

**A. Small Business Loans Less Than \$100,000**

Year	Intercept	Branch	Log (Assets)	Log (Loan /Assets)	State Employees	Overall F	Adj. R <sup>2</sup>
1993	1.25	0.23	-0.30	0.79	-0.01	590.87***	17.66
n=11002	(8.42***)	(12.31***)	(-38.82***)	(32.15***)	(-1.08)		
1994	2.02	0.23	-0.35	0.70	-0.04	762.55***	22.42
n=10542	(14.17***)	(12.39***)	(-46.95***)	(29.26***)	(-4.09***)		
1995	2.10	0.27	-0.36	0.72	-0.03	809.96***	24.47
n=9991	(14.84***)	(13.79***)	(-48.48***)	(30.16***)	(-3.78***)		

**B. Small Business Loans Less Than \$250,000**

Year	Intercept	Branch	Log (Assets)	Log (Loan /Assets)	State Employees	Overall F	Adj. R <sup>2</sup>
1993	-0.53	0.19	-0.18	0.96	0.06	710.73***	20.51
n=11002	(-4.24***)	(12.51***)	(-28.71***)	(46.92***)	(6.71***)		
1994	-0.20	0.23	-0.22	0.87	0.05	711.45***	21.23
n=10542	(-1.67*)	(14.28***)	(-35.13***)	(42.46***)	(6.28***)		
1995	-0.04	0.27	-0.24	0.83	0.05	729.65***	22.59
n=9991	(-0.32)	(16.28***)	(-38.39***)	(40.95***)	(6.47***)		

**C. Small Business Loans Less Than \$1,000,000**

Year	Intercept	Branch	Log (Assets)	Log (Loan /Assets)	State Employees	Overall F	Adj. R <sup>2</sup>
1993	-2.80	0.14	-0.02	1.07	0.11	944.30***	25.54
n=11002	(-23.70***)	(10.01***)	(-4.67***)	(57.00***)	(15.19***)		
1994	-2.80	0.20	-0.05	1.01	0.13	788.68***	23.01
n=10542	(-23.17***)	(13.10***)	(-8.92***)	(51.24***)	(16.54***)		
1995	-2.63	0.27	-0.07	0.94	0.13	731.63***	22.63
n=9991	(-21.81***)	(16.69***)	(-12.58***)	(47.57***)	(16.65***)		

**D. Small Business Loans Greater Than \$1,000,000**

Year	Intercept	Branch	Log (Assets)	Log (Loan /Assets)	State Employees	Overall F	Adj. R <sup>2</sup>
1993	5.05	0.01	-0.44	-0.33	-0.10	247.70***	8.24
n=10990	(16.43***)	(0.13)	(-25.72***)	(-6.03***)	(-5.43***)		
1994	5.22	-0.21	-0.46	-0.28	-0.11	250.59***	8.67
n=10512	(15.31***)	(-4.40***)	(-24.00***)	(-4.66***)	(-5.02***)		
1995	5.06	-0.33	-0.43	-0.17	-0.12	224.58***	8.24
n=9959	(13.91***)	(-6.06***)	(-20.71***)	(-2.63***)	(-5.18***)		

\*Estimates of parameter coefficients (and associated t statistics) are shown. Branch is a dummy variable defined as 1 if the bank operates branch offices and 0 if it has no branches. State Employees is defined as the number of employees in the bank's state that work in firms with the following ranges of employees: panel A - <20 employees, panel B - <99 employees, panel C - <499 employees, panel D - >500 employees, panel E - 20-99 employees, and panel F - 100-499 employees. Asterisks correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

Table 25, continued<sup>a</sup>

## E. Small Business Loans Between \$100,000 to \$250,000

Year	Intercept	Branch	Log (Assets)	Log (Loan /Assets)	State Employees	Overall F	Adj. R <sup>2</sup>
1993	7.56	0.16	-0.66	-0.18	-0.14	814.23***	22.82
n=11002	(30.85***)	(5.06***)	(-50.69***)	(-4.37***)	(-8.25***)		
1994	8.47	0.08	-0.73	-0.21	-0.17	1031.80***	28.12
n=10542	(34.77***)	(2.45**)	(-55.35***)	(-5.05***)	(-10.27***)		
1995	7.56	0.003	-0.69	-0.06	-0.13	910.54***	26.70
n=9991	(30.30***)	(0.08)	(-50.47***)	(-1.29)	(-7.65***)		

## F. Small Business Loans Between \$250,000 to \$1 Million

Year	Intercept	Branch	Log (Assets)	Log (Loan /Assets)	State Employees	Overall F	Adj. R <sup>2</sup>
1993	4.40	0.04	-0.50	-0.16	-0.07	583.60***	17.48
n=11002	(33.20***)	(1.49)	(-41.96***)	(-4.39***)	(-5.58***)		
1994	4.73	-0.01	-0.54	-0.12	-0.09	711.48***	21.24
n=10542	(36.07***)	(-0.30)	(-45.38***)	(-3.21***)	(-6.80***)		
1995	4.26	-0.08	-0.50	-0.03	-0.07	608.04***	19.55
n=9991	(31.43***)	(-2.58***)	(-40.09***)	(-0.86)	(-4.72**)		

<sup>a</sup>Estimates of parameter coefficients (and associated t statistics) are shown. Branch is a dummy variable defined as 1 if the bank operates branch offices and 0 if it has no branches. State Employees is defined as the number of employees in the bank's state that work in firms with the following ranges of employees: panel A - <20 employees, panel B - <99 employees, panel C - <499 employees, panel D - >500 employees, panel E - 20-99 employees, and panel F - 100-499 employees. Asterisks correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

Table 26  
**Small Business Lending by Affiliated and Independent Branch Banks  
in Urban Versus Rural Regions: June 1993**

**A. Dollar Amount of Loans Less Than \$250,000 (\$billions)**

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Affil.	N	Affil.	N	Affil.	N	Indep.	N	Indep.	N	Indep.	N
<\$100 million	11.6	1,789	8.0	873	19.7	2,662	2.8	477	3.8	463	6.6	940
\$100-\$300 million	12.4	615	16.0	734	28.4	1,349	1.9	108	4.6	221	6.6	329
\$300 mil.-\$1 billion	3.7	72	16.4	372	20.1	444	0.4	9	1.7	42	2.0	49
\$1-\$5 billion	7.0	5	19.1	187	19.8	192	NA	0	0.2	3	0.2	3
\$5-\$20 billion	5.3	1	26.2	83	26.7	84	NA	0	NA	0	NA	0
>\$20 billion	NA	0	9.6	19	9.6	19	NA	0	NA	0	NA	0
All Banks	28.9	2,482	95.3	2,268	124.3	4,750	5.0	592	10.3	729	15.3	1,321

**B. Small Business Loans/Total Assets (in percent)**

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Affil.	N	Affil.	N	Affil.	N	Indep.	N	Indep.	N	Indep.	N
<\$100 million	12.4	1,789	15.9	873	13.5	2,662	11.9	477	15.8	463	13.8	940
\$100-\$300 million	13.1	615	12.7	734	12.9	1,349	11.8	108	13.5	221	13.0	329
\$300 mil.-\$1 billion	12.0	72	8.9	372	9.4	444	12.8	9	7.7	42	8.4	49
\$1-\$5 billion	7.0	5	4.9	187	5.0	192	NA	0	4.4	3	4.4	3
\$5-\$20 billion	7.3	1	3.6	83	3.7	84	NA	0	NA	0	NA	0
>\$20 billion	NA	0	1.6	19	1.6	19	NA	0	NA	0	NA	0
All Banks	12.5	2,482	12.2	2,268	12.4	4,750	11.9	592	14.6	729	13.3	1,321

Table 27

**Small Business Lending by Affiliated and Independent Branch Banks  
in Urban Versus Rural Regions: June 1994**

**A. Dollar Amount of Loans Less Than \$250,000 (\$billions)**

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Affil.	N	Affil.	N	Affil.	N	Indep.	N	Indep.	N	Indep.	N
<\$100 million	11.6	1,795	6.9	851	18.5	2,646	2.6	465	3.6	463	6.2	928
\$100-\$300 million	12.4	688	14.1	787	26.5	1,475	1.6	99	4.1	235	5.7	334
\$300 mil.-\$1 billion	3.4	85	13.9	399	17.3	484	0.3	8	1.5	43	1.8	51
\$1-\$5 billion	1.2	7	17.7	198	18.9	205	NA	0	0.3	5	0.3	5
\$5-\$20 billion	.5	1	22.5	87	23.0	88	NA	0	NA	0	NA	0
>\$20 billion	NA	0	11.2	24	11.2	24	NA	0	NA	0	NA	0
All Banks	29.2	2,576	86.2	2,346	115.4	4,922	4.5	572	9.5	746	14.0	1,318

**B. Small Business Loans/Total Assets (in percent)**

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Affil.	N	Affil.	N	Affil.	N	Indep.	N	Indep.	N	Indep.	N
<\$100 million	12.2	1,795	14.2	851	12.9	2,646	11.6	465	14.8	463	13.2	928
\$100-\$300 million	11.8	688	10.5	787	11.1	1,475	10.5	99	11.3	235	11.1	334
\$300 mil.-\$1 billion	9.0	85	6.9	399	7.3	484	9.8	8	7.1	43	7.5	51
\$1-\$5 billion	9.1	7	4.4	198	4.6	205	NA	0	3.7	5	3.7	5
\$5-\$20 billion	6.2	1	2.9	87	3.0	88	NA	0	NA	0	NA	0
>\$20 billion	NA	0	1.5	24	1.5	24	NA	0	NA	0	NA	0
All Banks	12.0	2,576	10.4	2,346	11.2	4,922	11.4	572	13.2	746	12.4	1,318

**Table 28**  
**Small Business Lending by Affiliated and Independent Branch Banks**  
**in Urban Versus Rural Regions: June 1995**

**A. Dollar Amount of Loans Less Than \$250,000 (\$billions)**

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Affil.	N	Affil.	N	Affil.	N	Indep.	N	Indep.	N	Indep.	N
<\$100 million	12.0	1,784	7.2	842	19.2	2,626	2.5	415	3.2	406	5.6	821
\$100-\$300 million	13.6	750	15.4	853	29.0	1,603	1.7	99	4.3	240	5.9	339
\$300 mil. -\$1 billion	4.1	101	16.2	449	20.2	550	0.3	9	1.6	41	1.9	50
\$1-\$5 billion	1.7	12	20.3	213	22.0	225	NA	0	0.4	7	0.4	7
\$5-\$20 billion	0.9	1	27.1	98	28.1	99	NA	0	NA	0	NA	0
>\$20 billion	NA	0	14.5	26	14.5	26	NA	0	NA	0	NA	0
All Banks	32.3	2,648	100.7	2,481	133.0	5,129	4.5	523	9.4	694	13.8	1,217

**B. Small Business Loans/Total Assets (in percent)**

Total Assets	Rural		Urban		All		Rural		Urban		All	
	Affil.	N	Affil.	N	Affil.	N	Indep.	N	Indep.	N	Indep.	N
<\$100 million	12.5	1,784	14.4	842	13.1	2,626	12.1	415	14.5	406	13.3	821
\$100-\$300 million	11.8	750	10.7	853	11.2	1,603	10.7	99	11.5	240	11.2	339
\$300 mil. -\$1 billion	9.8	101	7.1	449	7.6	550	9.1	9	8.1	41	8.3	50
\$1-\$5 billion	8.3	12	4.6	213	4.8	225	NA	0	3.7	7	3.7	7
\$5-\$20 billion	6.0	1	3.0	98	3.0	99	NA	0	NA	0	NA	0
>\$20 billion	NA	0	1.6	26	1.6	26	NA	0	NA	0	NA	0
All Banks	12.2	2,648	10.4	2,481	11.3	5,129	11.8	523	13.0	694	12.4	1,217



Table 29  
 T Tests for Mean Differences in the  
 Small Business Loans Less Than \$250,000/Total Assets Ratio for  
 Affiliated Versus Independent Branch Banks in  
 Urban and Rural Regions : June 1993-June 1995

Total Assets	1993		1994		1995	
	Urban	Rural	Urban	Rural	Urban	Rural
<\$100 million	0.22	1.19	-1.23	1.69*	-0.09	1.22
\$100-\$300 million	-1.18	1.54	-1.72*	2.18**	-1.70*	1.81*
\$300 mil.-\$1 billion	1.12	NA	-0.21	NA	-1.19	NA
\$1-\$5 billion	NA	NA	NA	NA	NA	NA
\$5-\$20 billion	NA	NA	NA	NA	NA	NA
>\$20 billion	NA	NA	NA	NA	NA	NA
All Banks	-5.81***	1.82*	1.82*	1.94*	-8.08***	1.37

Table 30  
 Small Business Loans Less Than \$250,000/Total Assets Ratio for  
 Banks Located in States with Different Branching Regulations: June 1993<sup>a</sup>  
 (in percent)

Total Assets	No		Recent		Past		No		Recent		No	
	Statewide Branching	N	Statewide Branching	N	Statewide Branching	N	Recent <sup>b</sup>	N	Recent <sup>b</sup>	N	Recent <sup>b</sup>	N
<\$100 million	11.8	3,063	12.7	4,363	16.8	536	-4.59***	536	-8.41***	536	-8.41***	536
\$100-\$300 million	13.0	510	12.1	1,344	13.8	229	2.31**	229	-2.78***	229	-2.78***	229
\$300 mil.-\$1 billion	9.5	120	8.8	387	9.1	95	0.91	95	-0.41	95	-0.41	95
\$1-\$5 billion	4.4	45	4.9	146	5.0	55	-0.96	55	-0.07	55	-0.07	55
\$5-\$20 billion	3.1	17	3.7	53	4.5	20	NA	20	-0.62	20	-0.62	20
>\$20 billion	0.6	6	2.1	9	1.9	4	NA	4	NA	4	NA	4
All Banks	11.8	3,761	12.1	6,302	14.3	939	-1.71*	939	-6.25***	939	-6.25***	939

<sup>a</sup>This table classifies states into three categories: (1) no statewide branching allowed, (2) recent statewide branching allowed (i.e., after 1980), and past statewide branching allowed (i.e., prior to 1980).

<sup>b</sup>Simple t tests for differences in means are given in these columns. The levels of significance are as follows: \*\*\* -- .01, \*\* -- .05, and \* -- .10. NA is indicated when the sample size of one group falls below 20 observations.

Table 31  
 Small Business Loans Less Than \$250,000/Total Assets Ratio for  
 Banks Located in States with Different Branching Regulations: June 1994<sup>a</sup>  
 (in percent)

	No Statewide		Recent Statewide		Past Statewide		No Statewide		Recent Statewide		No Statewide	
	Branching	N	Branching	N	Branching	N	Branching	N	Branching	N	Branching	N
Total Assets	11.7	2,874	12.1	4,074	15.1	501	-2.46**	-6.79***	-7.71***	-0.28	-1.36	0.43
<\$100 million	11.0	539	10.6	1,338	11.2	236	1.24	-1.24	-1.89*	0.96	NA	NA
\$100-\$300 million	7.2	130	7.0	398	8.3	88	0.41	0.96	NA	NA	NA	NA
\$300 mil.-\$1 billion	4.4	42	4.5	146	4.0	57	-0.13	NA	NA	NA	NA	NA
\$1-\$5 billion	2.6	21	3.1	57	3.0	17	-1.01	NA	NA	NA	NA	NA
\$5-\$20 billion	0.4	6	1.9	12	1.6	6	NA	NA	NA	NA	NA	NA
>\$20 billion	11.3	3,612	11.2	6,025	12.4	905	0.68	-4.05***	-3.62***			
All Banks												

<sup>a</sup>This table classifies states into three categories: (1) no statewide branching allowed, (2) recent statewide branching allowed (i.e., after 1980), and past statewide branching allowed (i.e., prior to 1980).

<sup>b</sup>Simple t tests for differences in means are given in these columns. The levels of significance are as follows: \*\*\* -- .01, \*\* -- .05, and \* -- .10. NA is indicated when the sample size of one group falls below 20 observations.

**Table 32**  
**Small Business Loans Less Than \$250,000/Total Assets Ratio for**  
**Banks Located in States with Different Branching Regulations: June 1995<sup>a</sup>**  
**(in percent)**

	No		Recent		Past		No		Recent		No	
	Statewide	N	Statewide	N	Statewide	N	Statewide	N	Statewide	N	Statewide	N
Total Assets	Branching		Branching		Branching		Branching		Branching		Branching	
<\$100 million	12.0	2,671	12.3	3,761	14.4	456	-1.61	456	-5.02***	-1.31	-5.64***	-5.64***
\$100-\$300 million	11.2	562	10.9	1,310	11.5	235	1.21	235	-1.31	-1.31	-0.49	-0.49
\$300 mil.-\$1 billion	7.3	133	7.4	396	8.4	93	-0.26	93	-1.61	-1.61	-1.56	-1.56
\$1-\$5 billion	4.3	48	4.8	141	4.4	55	-0.62	55	0.68	0.68	0.10	0.10
\$5-\$20 billion	2.8	20	3.1	65	2.4	19	-0.75	19	NA	NA	NA	NA
>\$20 billion	0.4	6	0.2	13	1.9	7	NA	7	NA	NA	NA	NA
All Banks	11.5	3,440	11.3	5,686	12.0	865	1.36	865	-2.23**	-2.23**	-1.49	-1.49

<sup>a</sup>This table classifies states into three categories: (1) no statewide branching allowed, (2) recent statewide branching allowed (i.e., after 1980), and past statewide branching allowed (i.e., prior to 1980).

<sup>b</sup>Simple t tests for differences in means are given in these columns. The levels of significance are as follows: \*\*\* -- .01, \*\* -- .05, and \* -- .10. NA is indicated when the sample size of one group falls below 20 observations.

Table 33  
 Small Business Loans Less Than \$250,000/Total Assets Ratio for  
 Banks Located in States with Different Multibank Holding Company Regulations: June 1993<sup>a</sup>  
 (in percent)

Asset Size of Banks	No MBHC		National		No Statewide		Statewide		No Nat'l		vs. Statewide <sup>b</sup>	
	Entry	N	Allowed	N	MBHCs	N	MBHCs	N	MBHCs	National <sup>b</sup>	N	vs.
<\$100 million	13.0	3,805	12.4	4,157	11.3	4,171	14.1	3,791	3.22***	3.36***	14.61***	
\$100-\$300 million	13.3	740	12.1	1,343	11.9	841	12.9	1,242	3.36***	1.01	-2.85***	
\$300 mil.-\$1 billion	9.4	203	8.8	389	10.0	190	8.6	412	0.50	1.14	2.22**	
\$1-\$5 billion	5.1	71	4.8	175	4.7	67	4.9	179	NA	NA	-0.32	
\$5-\$20 billion	4.4	25	3.5	65	3.7	15	3.7	75	NA	NA	NA	
>\$20 billion	2.3	4	1.4	15	1.1	1	1.6	18	NA	NA	NA	
All Banks	12.7	4,848	11.7	6,154	11.3	5,285	13.0	5,714	6.09***	-10.84***		

<sup>a</sup>This table classifies states into four categories: (1) no national entry by MBHCs allowed, (2) national entry by MBHCs allowed (i.e., after 1980), (3) no statewide MBHCs allowed, and (4) statewide MBHCs allowed.

<sup>b</sup>Simple t tests for differences in means are given in these columns. The levels of significance are as follows: \*\*\* -- .01, \*\* -- .05, and \* -- .10. NA is indicated when the sample size of one group falls below 20 observations.

**Table 34**  
**Small Business Loans Less Than \$250,000/Total Assets Ratio for**  
**Banks Located in States with Different Multibank Holding Company Regulations: June 1994<sup>a</sup>**  
**(in percent)**

Asset Size of Banks	No MBHC		National		Statewide		No Nat'l		No Statewide				
	National Entry	N	Entry Allowed	N	MBHCs	N	MBHCs	N	MBHCs	N	MBHCs	National <sup>b</sup> vs. Statewide <sup>b</sup>	vs. Statewide <sup>b</sup>
<\$100 million	12.5	3,599	11.8	3,850	11.0	3,946	13.4	3,503	4.17***	3,503	13.4	4.17***	-13.30***
\$100-\$300 million	11.7	759	10.3	1,354	10.7	859	10.9	1,254	4.95**	1,254	10.9	4.95**	-0.55
\$300 mil.-\$1 billion	7.8	213	7.0	403	7.3	195	7.2	421	1.83*	421	7.2	1.83*	0.22
\$1-\$5 billion	4.4	71	4.4	174	5.2	63	4.1	182	0.06	182	4.1	0.06	2.04**
\$5-\$20 billion	3.5	30	2.7	65	2.9	19	3.0	76	1.99*	76	3.0	1.99*	NA
>\$20 billion	2.4	5	1.2	19	1.8	2	1.4	22	NA	22	1.4	NA	NA
All Banks	12.0	4,677	10.8	5,865	10.7	5,084	11.8	5,458	8.53***	5,458	11.8	8.53***	-7.67***

<sup>a</sup>This table classifies states into four categories: (1) no national entry by MBHCs allowed, (2) national entry by MBHCs allowed (i.e., after 1980), (3) no statewide MBHCs allowed, and (4) statewide MBHCs allowed.

<sup>b</sup>Simple t tests for differences in means are given in these columns. The levels of significance are as follows: \*\*\* - .01, \*\* - .05, and \* - .10. NA is indicated when the sample size of one group falls below 20 observations.

**Table 35**  
**Small Business Loans Less Than \$250,000/Total Assets Ratio for**  
**Banks Located in States with Different Multibank Holding Company Regulations: June 1995<sup>a</sup>**  
**(in percent)**

Asset Size of Banks	No MBHC National		National Entry		Statewide		Statewide		No Nat'l		No Statewide	
	Entry	N	Allowed	N	N	MBHCs	N	MBHCs	N	National <sup>b</sup>	N	Statewide <sup>b</sup>
<\$100 million	12.7	3,338	11.9	3,550	11.3	3,672	13.5	3,216	4.39***	4.39***	4.39***	-12.96***
\$100-\$300 million	12.1	787	10.4	1,320	11.0	896	11.1	1,211	6.05***	6.05***	6.05***	-0.37
\$300 mil.-\$1 billion	7.8	223	7.4	399	7.7	202	7.5	420	1.24	1.24	1.24	0.56
\$1-\$5 billion	5.2	76	4.4	168	5.2	74	4.4	170	1.49	1.49	1.49	1.61
\$5-\$20 billion	3.6	28	2.6	76	2.9	22	2.9	82	1.60	1.60	1.60	NA
>\$20 billion	2.1	7	1.5	19	1.8	2	1.6	24	NA	NA	NA	0.11
All Banks	12.2	4,459	10.9	5,532	10.9	4,868	11.9	5,123	9.20***	9.20***	9.20***	-7.17***

<sup>a</sup>This table classifies states into four categories: (1) no national entry by MBHCs allowed, (2) national entry by MBHCs allowed (i.e., after 1980), (3) no statewide MBHCs allowed, and (4) statewide MBHCs allowed.

<sup>b</sup>Simple t tests for differences in means are given in these columns. The levels of significance are as follows: \*\*\* -- .01, \*\* -- .05, and \* -- .10. NA is indicated when the sample size of one group falls below 20 observations.

**Table 36**  
**Regression Analyses of the Relationship Between the**  
**Small Business Loans/Total Assets Ratio and**  
**State Multibank Holding Company and Branch Banking Regulations: 1993-1995<sup>a</sup>**

**A. Small Business Loans Less Than \$100,000**

Year	Intercept	Entry	MBHC	Branch	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	1.9756	-0.320	-0.20	-0.31	-0.25	0.35	4.11***	23.71
n=51	(1.4313)	(-1.69*)	(-1.11)	(-1.51)	(-3.25***)	(0.56)		
1994	1.89	-0.34	-0.37	-0.42	-0.23	0.88	6.28***	34.56
n=51	(1.45)	(-1.97**)	(-2.11**)	(-2.14**)	(-3.18***)	(1.39)		
1995	1.96	-0.39	-0.41	-0.35	-0.23	0.89	6.00***	33.35
n=51	(1.42)	(-2.17**)	(-2.27**)	(-1.76*)	(-3.16***)	(1.23)		

**B. Small Business Loans Less Than \$250,000**

Year	Intercept	Entry	MBHC	Branch	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	1.88	-0.22	-0.19	-0.17	-0.22	0.57	4.26***	24.60
n=51	(1.69*)	(-1.58)	(-1.32)	(-1.09)	(-3.62***)	(1.13)		
1994	1.69	-0.26	-0.29	-0.23	-0.21	0.72	5.90***	32.89
n=51	(1.63)	(-1.91*)	(-2.08**)	(-1.46)	(-3.63***)	(1.41)		
1995	1.69	-0.30	-0.32	-0.19	-0.21	0.60	5.28***	29.98
n=51	(1.48)	(-2.02**)	(-2.13**)	(-1.15)	(-3.47***)	(1.01)		

**C. Small Business Loans Less Than \$1 Million**

Year	Intercept	Entry	MBHC	Branch	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	1.19	-0.15	-0.13	-0.03	-0.16	0.62	3.56***	20.37
n=51	(1.41)	(-1.39)	(-1.19)	(-0.25)	(-3.53***)	(1.65)		
1994	1.12	-0.18	-0.18	-0.04	-0.16	0.55	4.30***	24.82
n=51	(1.38)	(-1.70*)	(-1.72*)	(-0.35)	(-3.59***)	(1.37)		
1995	1.03	-0.21	-0.20	-0.03	-0.16	0.38	3.43***	19.55
n=51	(1.11)	(-1.79*)	(-1.66*)	(-0.24)	(-3.20***)	(0.78)		

**D. Large Business Loans More Than \$1 Million**

Year	Intercept	Entry	MBHC	Branch	Log (Assets)	Log (Loan /Assets)	Overall F	Adj. R <sup>2</sup>
1993	-7.87	0.05	0.11	0.62	0.32	1.31	12.12***	52.64
n=51	(-6.67***)	(0.32)	(0.69)	(3.58***)	(4.87***)	(2.46**)		
1994	-7.41	0.07	0.13	0.55	0.28	0.79	11.98***	52.33
n=51	(-7.55***)	(0.58)	(1.00)	(3.77***)	(5.10***)	(1.62)		
1995	-7.47	0.02	0.14	0.51	0.26	0.16	9.10***	44.75
n=51	(-7.18***)	(0.17)	(1.06)	(3.42***)	(4.76***)	(0.29)		

<sup>a</sup>Estimates of parameter coefficients (and associated t statistics) are shown. Entry is a dummy variable defined as 1 if the state allowed national entry by outside banks and 0 otherwise. MBHC is a dummy variable defined as 1 if the state allows statewide multibank holding companies and 0 if not. Branch is a dummy variable defined as 1 if the state allows statewide branching and 0 if not. Coefficients of continuous variables are elasticities of these variables with respect to changes in the small business loan ratio. Asterisks correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.



Table 36 continued<sup>a</sup>

## E. Small Business Loans Between \$100,000 and \$250,000

Year	Intercept	Entry	MBHC	Branch	Log (Assets)	Log (Loan / Assets)	Overall F	Adj. R <sup>2</sup>
1993	-1.24	-0.11	-0.20	0.23	-0.12	1.10	3.68***	21.12
n=51	(-1.37)	(-0.90)	(-1.73*)	(1.71*)	(-2.47**)	(2.69***)		
1994	-1.07	-0.11	-0.16	0.15	-0.14	0.58	2.72**	14.69
n=51	(-1.24)	(0.92)	(-1.36)	(1.17)	(-2.97***)	(1.36)		
1995	-0.84	-0.14	-0.18	0.11	-0.16	0.36	2.31*	11.59
n=51	(-0.86)	(-1.14)	(-1.38)	(0.72)	(-2.97***)	(0.72)		

## F. Small Business Loans Between \$250,000 and \$1 Million

Year	Intercept	Entry	MBHC	Branch	Log (Assets)	Log (Loan / Assets)	Overall F	Adj. R <sup>2</sup>
1993	-2.13	-0.05	-0.12	0.31	-0.04	0.92	3.18**	17.87
n=51	(-2.52**)	(-0.49)	(-1.08)	(2.48**)	(-0.91)	(2.39**)		
1994	-1.60	-0.04	-0.10	0.26	-0.08	0.45	2.25*	11.11
n=51	(-2.10**)	(-0.47)	(-0.99)	(2.28**)	(-1.85*)	(1.22)		
1995	-1.44	-0.11	-0.09	0.19	-0.09	0.24	1.24	2.38
n=51	(-1.67*)	(-1.01)	(-0.82)	(1.58)	(-1.88*)	(0.53)		

<sup>a</sup>Estimates of parameter coefficients (and associated t statistics) are shown. Entry is a dummy variable defined as 1 if the state allowed national entry by outside banks and 0 otherwise. MBHC is a dummy variable defined as 1 if the state allows statewide multibank holding companies and 0 if not. Branch is a dummy variable defined as 1 if the state allows statewide branching and 0 if not. Coefficients of continuous variables are elasticities of these variables with respect to changes in the small business loan ratio. Asterisks correspond to the following levels of significance: \*\*\* -- .01, \*\* -- .05, and \* -- .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

Table 37

Further Regression Analyses of the Relationship Between the Small Business Loans/Total Assets Ratio and Multibank Holding Company and Branch Banking State Regulations: 1993-1995<sup>a</sup>

## A. Small Business Loans Less Than \$100,000

Year	Intercept	Entry	MBHC	Branch	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993	3.61	-0.27	-0.19	-0.33	-0.92	0.18	0.80	6.83***	41.17
n=51	(2.82***)	(-1.71*)	(-1.17)	(-1.88*)	(-4.84***)	(0.33)	(3.78***)		
1994	3.36	-0.31	-0.35	-0.47	-0.78	1.06	0.67	7.72***	44.66
n=51	(2.60**)	(-1.93**)	(-2.22**)	(-2.62**)	(-4.04***)	(1.80*)	(3.03***)		
1995	3.31	-0.37	-0.40	-0.38	-0.74	1.08	0.61	7.19***	42.62
n=51	(2.42**)	(-2.20**)	(-2.38**)	(-2.08**)	(-3.93***)	(1.61)	(2.88***)		

## B. Small Business Loans Less Than \$250,000

Year	Intercept	Entry	MBHC	Branch	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993	3.23	-0.20	-0.18	-0.22	-0.87	0.47	0.76	8.77***	48.27
n=51	(3.35***)	(-1.70*)	(-1.45)	(-1.65)	(-5.85***)	(1.12)	(4.65***)		
1994	2.94	-0.24	-0.28	-0.31	-0.76	0.94	0.66	9.08***	49.24
n=51	(3.07***)	(-1.95*)	(-2.27**)	(-2.21***)	(-5.11***)	(2.10**)	(3.94***)		
1995	2.92	-0.28	-0.30	-0.24	-0.76	0.88	0.64	8.27***	46.59
n=51	(2.80***)	(-2.16**)	(-2.33**)	(-1.69*)	(-5.04***)	(1.69*)	(3.87***)		

## C. Small Business Loans Less Than \$1,000,000

Year	Intercept	Entry	MBHC	Branch	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993	2.40	-0.13	-0.11	-0.10	-0.76	0.59	0.69		55.68
n=51	(3.63***)	(-1.54)	(-1.37)	(-1.03)	(-7.29***)	(2.06**)	(6.07***)	11.47***	
1994	2.29	-0.15	-0.17	-0.14	-0.72	0.83	0.65		54.10
n=51	(3.42***)	(-1.77*)	(-2.02**)	(-1.42)	(-6.66***)	(2.62**)	(5.45***)	10.82***	
1995	2.31	-0.19	-0.19	-0.11	-0.74	0.78	0.68		52.09
n=51	(3.07***)	(-2.07**)	(-1.97*)	(-1.06)	(-6.71***)	(2.06**)	(5.62***)	10.06***	

## D. Small Business Loans Greater Than \$1,000,000

Year	Intercept	Entry	MBHC	Branch	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993	-6.89	0.07	0.13	0.56	0.09	1.35	0.21		52.74
n=51	(-4.58***)	(0.45)	(0.87)	(3.11***)	(0.46)	(2.54**)	(1.05)	10.30***	
1994	-6.30	0.11	0.16	0.47	0.03	0.97	0.24		53.41
n=51	(-5.06***)	(0.80)	(1.26)	(3.05***)	(0.21)	(1.96*)	(1.42)	10.55***	
1995	-5.67	0.05	0.20	0.41	-0.11	0.54	0.37		49.87
n=51	(-4.54***)	(0.44)	(1.50)	(2.71***)	(-0.63)	(0.99)	(2.36**)		

<sup>a</sup>Estimates of parameter coefficients (and associated t statistics) are shown. Entry is a dummy variable defined as 1 if the state allowed national entry by banks and 0 otherwise. MBHC is a dummy variable defined as 1 if the state allows statewide multibank holding companies and 0 if not. Branch is a dummy variable defined as 1 if the state allows statewide branching and 0 if not. State Employees is defined as the number of employees in the bank's state that work in firms with the following ranges of employees: panel A -- <20 employees, panel B -- <99 employees, panel C -- <499 employees, panel D -- >500 employees, panel E -- 20-99 employees, and panel F -- 100-499 employees.

Asterisks correspond to the following levels of significance: \*\*\* -- .01, \*\* -- .05, and \* -- .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

Table 37 continued<sup>a</sup>

## E Small Business Loans Between \$100,000 and \$250,000

Year	Intercept	Entry	MBHC	Branch	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993	0.84	-0.09	-0.18	0.17	-0.74	1.06	0.70		53.35
=51	(1.07)	(-0.98)	(-1.99*)	(1.60)	(-6.41***)	(3.37***)	(5.66***)	10.53***	
1994	0.96	-0.08	-0.14	0.05	-0.72	0.85	0.68	8.62***	47.78
=51	(1.24)	(-0.89)	(-1.51)	(0.55)	(-6.38***)	(2.54**)	(5.43***)		
1995	1.37	-0.13	-0.15	0.02	-0.77	0.76	0.72	9.14***	49.40
=51	(1.67*)	(-1.35)	(-1.60)	(0.21)	(-6.90***)	(1.94*)	(5.88***)		

## F Small Business Loans Between \$250,000 and \$1 Million

Year	Intercept	Entry	MBHC	Branch	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993	0.55	-0.01	-0.08	0.17	-0.67	0.97	0.69		54.92
=51	(0.73)	(-0.23)	(-1.02)	(1.87**)	(-6.23***)	(3.45***)	(6.16***)	11.15***	
1994	1.02	-0.00	-0.06	0.09	-0.68	0.90	0.68		57.13
=51	(1.57**)	(-0.00)	(-0.96)	(1.14)	(-7.51***)	(3.34***)	(7.02***)	12.10***	
1995	1.53	-0.08	-0.06	0.04	-0.74	0.94	0.74		58.85
=51	(2.27**)	(-1.09)	(-0.84)	(0.49)	(-8.44***)	(3.07***)	(7.92***)	12.92***	

<sup>a</sup>Estimates of parameter coefficients (and associated t statistics) are shown. Entry is a dummy variable defined as 1 if the state allowed national entry by banks and 0 otherwise. MBHC is a dummy variable defined as 1 if the state allows statewide multibank holding companies and 0 if not. Branch is a dummy variable defined as 1 if the state allows statewide branching and 0 if not. State Employees is defined as the number of employees in the bank's state that work in firms with the following ranges of employees: panel A -- <20 employees, panel B -- <99 employees, panel C -- <499 employees, panel D -- >500 employees, panel E -- 20-99 employees, and panel F -- 100-499 employees. Asterisks correspond to the following levels of significance: \*\*\* -- .01, \*\* -- .05, and \* -- .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

Table 38

Regression Analyses of the Relationship Between the Small Business Loans/Total Assets Ratio and Commercial Banks in Holding Companies Versus Independent Banks and Branch Banks with More Than Five Versus Five Or Less Branches: 1993-1995<sup>a</sup>

#### A. Small Business Loans Less Than \$100,000

Year	Intercept	Holding Company	Branch Organization	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993 n=11002	0.77 (4.95***)	0.08 (3.99***)	-0.12 (-3.50***)	-0.25 (-8.44***)	0.82 (33.04***)	-0.01 (-0.72)	443.05***	16.73
1994 n=10542	1.55 (10.23***)	0.10 (4.87***)	-0.06 (-1.97**)	-0.31 (-35.73***)	0.73 (30.15***)	-0.03 (-3.18***)	577.93***	21.49
1995 n=9991	1.52 (10.03***)	0.09 (4.61***)	-0.08 (-2.55***)	-0.31 (-35.18***)	0.76 (31.30***)	-0.03 (-3.02***)	605.66***	23.23

#### B. Small Business Loans Less Than \$250,000

Year	Intercept	Holding Company	Branch Organization	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993 n=11002	-0.95 (-7.07***)	0.04 (2.60***)	-0.12 (-4.34***)	-0.14 (-18.80***)	0.98 (47.88***)	0.05 (6.59***)	535.98***	19.56
1994 n=10542	-0.69 (-5.22***)	0.05 (3.04***)	-0.11 (-3.89***)	-0.17 (-23.32***)	0.90 (43.60***)	0.06 (6.49***)	524.29***	19.89
1995 n=9991	-0.56 (-4.27***)	0.05 (2.66***)	-0.08 (-2.94***)	-0.19 (-24.79***)	0.87 (42.34***)	0.06 (6.55***)	520.07***	20.62

#### C. Small Business Loans Less Than \$1,000,000

Year	Intercept	Holding Company	Branch Organization	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993 n=11002	-3.13 (-25.32***)	0.02 (1.37)	-0.12 (-4.74***)	0.01 (1.74*)	1.10 (57.92***)	0.11 (14.74***)	735.16***	25.02
1994 n=10542	-3.24 (-25.30***)	0.02 (1.12)	-0.12 (-4.53***)	-0.004 (-0.51)	1.04 (52.44***)	0.13 (16.17***)	592.53***	21.91
1995 n=9991	-3.16 (-24.43***)	0.02 (1.13)	-0.10 (-3.83***)	-0.01 (-1.84*)	0.98 (49.07***)	0.13 (16.12***)	519.12***	20.59

#### D. Small Business Loans Greater Than \$1,000,000

Year	Intercept	Holding Company	Branch Organization	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993 n=10990	5.32 (16.50***)	-0.06 (-1.26)	0.17 (2.26**)	-0.47 (-23.50***)	-0.33 (-6.05***)	-0.11 (-5.47***)	199.59**	8.29
1994 n=51	5.72 (15.86***)	-0.01 (-0.26)	0.15 (1.87*)	-0.52 (-23.40***)	-0.32 (-5.20***)	-0.11 (-4.96***)	96.99***	8.53
1995 n=51	5.97 (15.38***)	-0.08 (-1.48)	0.24 (2.78***)	-0.53 (-21.56***)	-0.22 (-3.32***)	-0.13 (-5.27***)	73.81***	7.98

<sup>a</sup>Estimates of parameter coefficients (and associated t statistics) are shown. Holding Company is 1 if the bank is a member of a holding company and 0 if it is an independent bank. Branch Organization is 1 if the bank has more than five branch offices and 0 if less than or equal to five branches. State Employees is defined as the number of employees in the bank's state that work in firms with the following ranges of employees: panel A - <20 employees, panel B - <99 employees, panel C - <499 employees, panel D - >500 employees, panel E - 20-99 employees, and panel F - 100-499 employees. Asterisks correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

Table 38, continued<sup>a</sup>**E. Small Business Loans Between \$100,000 and \$250,000**

Year	Intercept	Holding Company	Branch Organization	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993 n=11002	7.46 (29.04***)	-0.002 (-0.09)	0.05 (0.80)	-0.65 (-43.06***)	-0.16 (-3.92***)	-0.14 (-8.19***)	644.87***	22.64
1994 n=10542	8.48 (33.02***)	0.04 (1.24)	0.10 (1.82*)	-0.74 (-48.36***)	-0.21 (-4.99***)	-0.17 (-9.81***)	825.05***	28.10
1995 n=9991	7.72 (29.12***)	0.02 (0.65)	0.11 (2.05**)	-0.71 (-44.95***)	-0.06 (-1.40)	-0.13 (-7.32***)	729.63***	26.72

**F. Small Business Loans Between \$250,000 and \$1 Million**

Year	Intercept	Holding Company	Branch Organization	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993 n=11002	5.28 (23.36***)	-0.002 (-0.08)	0.11 (2.19**)	-0.52 (-37.71***)	-0.16 (-4.27***)	-0.06 (-4.21***)	464.36***	17.40
1994 n=10542	6.08 (27.02***)	0.03 (1.03)	0.17 (3.47***)	-0.58 (-41.86***)	-0.12 (-3.37***)	0.68 (-5.93***)	570.90***	21.28
1995 n=9991	5.52 (23.61***)	-0.01 (-0.25)	0.20 (3.78***)	-0.55 (-38.13***)	-0.05 (-1.15)	-0.07 (-4.36***)	488.09***	19.60

Estimates of parameter coefficients (and associated t statistics) are shown. Holding Company is 1 if the bank is a member of a holding company and 0 if it is an independent bank. Branch Organization is 1 if the bank has more than five branch offices and 0 if less than or equal to five branches. State Employees is defined as the number of employees in the bank's state that work in firms with the following ranges of employees: panel A -- <20 employees, panel B -- <99 employees, panel C -- <499 employees, panel D -- >500 employees, panel E -- 20-99 employees, and panel F -- 100-499 employees. Asterisks correspond to the following levels of significance: \*\*\* -- .01, \*\* -- .05, and \* -- .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

Table 39

Regression Analyses of the Relationship Between the Small Business Loans/Total Assets Ratio and Geographic Diversification for U. S. Bank Holding Companies Only<sup>a</sup>

## A. Small Business Loans Less Than \$100,000

Year	Intercept	Geographic Diversif.	Age	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993 n=5543	0.82 (3.82***)	-0.18 (-2.86***)	-0.002 (-6.82***)	-0.19 (-18.28***)	0.65 (19.52***)	-0.03 (-2.39**)	176.84***	13.69
1994 n=5388	1.83 (8.82***)	-0.35 (-5.94***)	-0.001 (-2.06**)	-0.27 (-26.81***)	0.73 (21.55***)	-0.05 (-3.26***)	281.58***	20.66
1995 n=5221	1.83 (9.06***)	-0.25 (-4.61***)	-0.0004 (-1.39)	-0.26 (-26.53***)	0.68 (19.15***)	-0.06 (-4.65***)	268.97***	20.42

## B. Small Business Loans Less Than \$250,000

Year	Intercept	Geographic Diversif.	Age	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993 n=5543	-0.78 (-4.37***)	0.09 (1.74*)	-0.003 (-13.18***)	-0.07 (-8.62***)	0.81 (29.69***)	0.003 (0.24)	244.71***	18.02
1994 n=5388	-0.15 (-0.83)	-0.04 (-0.91)	-0.003 (-10.22***)	-0.13 (-15.45***)	0.86 (31.06***)	0.002 (0.22)	281.56***	20.66
1995 n=5221	-0.06 (-0.35)	0.01 (0.17)	-0.002 (-9.76***)	-0.13 (-15.62***)	0.81 (27.62***)	-0.01 (-1.10***)	241.83***	18.74

## C. Small Business Loans Less Than \$1,000,000

Year	Intercept	Geographic Diversif.	Age	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993 n=5543	-2.86 (-17.53***)	0.32 (7.12***)	-0.004 (-20.14***)	0.07 (9.51***)	0.91 (36.40***)	0.04 (4.31***)	405.44***	26.7 3
1994 n=5388	-2.65 (-16.50***)	0.27 (6.06***)	-0.004 (-18.98***)	0.05 (6.27***)	0.98 (38.81***)	0.05 (5.31***)	407.13***	27.3 8
1995 n=5221	-2.50 (-15.76***)	0.28 (6.55***)	-0.004 (-19.02***)	0.05 (6.09***)	0.96 (35.66***)	0.04 (4.36***)	353.98***	25.2 7

## D. Small Business Loans Greater Than \$1,000,000

Year	Intercept	Geographic Diversif.	Age	Log (Assets)	Log (Loan /Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>
1993 n=5534	3.67 (7.25***)	0.47 (3.09***)	0.003 (4.28**)	-0.45 (-17.12***)	-0.24 (-2.86***)	-0.05 (-1.52)	115.90***	9.41
1994 n=5371	3.36 (6.21***)	0.23 (1.24)	0.01 (6.34***)	-0.52 (-18.66***)	-0.32 (-3.37***)	0.03 (0.81)	117.92***	9.82
1995 n=5207	3.72 (6.56***)	0.35 (2.16**)	0.01 (6.72***)	-0.49 (-16.88***)	-0.11 (-1.10)	-0.03 (-1.00)	105.57***	9.13

<sup>a</sup>Estimates of parameter coefficients (and associated t statistics) are shown. Geographic Diversification is defined as  $\log \text{HHI} / (\log \text{states}) / (\log \text{regions})$ , where HHI is for each bank holding company (BHC) the sum of the squared ratio of each bank's total assets divided by all banks in the BHC, and states is the number of states in which the BHC operates banks, and likewise for region which is defined as northeast, midwest, south, and west. Age is the number of years that the bank has been in operation. State Employees is defined as the number of employees in the bank's state that work in firms with the following ranges of employees: panel A - <20 employees, panel B - <99 employees, panel C - <499 employees, panel D - >500 employees, panel E - 20-99 employees, and panel F - 100-499 employees. Asterisks correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

Table 39, continued<sup>a</sup>

E. Small Business Loans Between \$100,000 and \$250,000		Geographic		Log (Loan /Assets)		Log (State Employees)		Overall F	Adj. R <sup>2</sup>
Year	Intercept	Diversif.	Age	Log (Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>		
1993 n=5543	5.14 (13.14***)	0.68 (6.00***)	0.002 (2.85***)	-0.55 (-28.42***)	-0.10 (-1.57)	-0.09 (-3.65***)	325.20***	22.63	
1994 n=5388	5.96 (15.32***)	0.33 (2.98***)	0.004 (6.61***)	-0.65 (-34.03***)	-0.17 (-2.65***)	-0.07 (-2.82***)	401.05***	27.08	
1995 n=5221	5.68 (14.73***)	0.29 (2.70***)	0.003 (6.56***)	-0.63 (-32.94***)	-0.02 (-0.23)	-0.06 (-2.69***)	368.15***	26.02	

F. Small Business Loans Between \$250,000 and \$1 Million		Geographic		Log (Loan /Assets)		Log (State Employees)		Overall F	Adj. R <sup>2</sup>
Year	Intercept	Diversif.	Age	Log (Assets)	Log (State Employees)	Overall F	Adj. R <sup>2</sup>		
1993 n=5543	3.17 (9.03***)	0.73 (6.83***)	0.002 (2.74***)	-0.43 (-23.85***)	-0.11 (-1.81*)	-0.03 (-1.23)	239.17***	17.69	
1994 n=5388	4.25 (12.41***)	0.30 (2.91***)	0.003 (5.98***)	-0.52 (-29.06***)	0.04 (0.67)	-0.02 (-1.07)	285.15***	20.87	
1995 n=5221	3.94 (11.39***)	0.28 (2.78***)	0.002 (4.24***)	-0.48 (-26.85***)	0.07 (1.15)	-0.03 (-1.21)	242.55***	18.79	

<sup>a</sup>Estimates of parameter coefficients (and associated t statistics) are shown. Geographic Diversification is defined as  $\log \text{HHI}(\text{1/regions})$ , where HHI is for each bank holding company (BHC) the sum of the squared ratio of each bank's total assets divided by all banks in the BHC, and states is the number of states in which the BHC operates banks, and likewise for region which is defined as northeast, midwest, south, and west. Age is the number of years that the bank has been in operation. State Employees is defined as the number of employees in the bank's state that work in firms with the following ranges of employees: panel A -- <20 employees, panel B -- <99 employees, panel C -- <499 employees, panel D -- >500 employees, panel E -- 20-99 employees, and panel F -- 100-499 employees. Asterisks correspond to the following levels of significance: \*\*\* -- .01, \*\* -- .05, and \* -- .10. The overall F statistic and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression models.

**Table 40**  
**T Tests for Mean Changes in the**  
**Small Business Loans Less Than \$250,000/Total Assets Ratio for**  
**Banks Acquired in the Second Half of 1993<sup>a</sup>**  
**(in percent)**

	Mean			Mean		
	6/93-6/94	6/94-6/95	6/93-6/95	6/94-6/95	6/93-6/95	6/93-6/95
Total Assets	Change	t	Statistic	N	t	Statistic
<\$100 million	0.13	0.40	0.40	188	-2.69***	-1.61
\$100-\$300 million	1.53	2.23***	2.23***	45	1.50	2.68***
\$300 mil.-\$1 billion	2.09	12	NA	11	NA	NA
\$1-\$5 billion	1.74	2	NA	2	NA	NA
\$5-\$20 billion	NA	0	NA	0	NA	NA
>\$20 billion	NA	0	NA	0	NA	NA
All Banks	0.49	265	1.65*	246	-1.75*	0.28

<sup>a</sup>Simple t tests for differences in means are given in these columns. The levels of significance are as follows: \*\*\* -- .01, \*\* -- .05, and \* -- .10. NA is indicated when the sample size of one group falls below 20 observations.



**Table 41**  
**T Tests for Mean Changes in the**  
**Small Business Loans Less Than \$250,000/Total Assets Ratio for**  
**Banks Acquired in the Second Half of 1994<sup>a</sup>**  
**(in percent)**

Total Assets	Mean		t Statistic
	6/94-6/95	N	
<\$100 million	-0.53	232	-1.99**
\$100-\$300 million	0.58	39	0.72
\$300 mil. -\$1 billion	-0.16	12	NA
\$1-\$5 billion	-0.17	3	NA
\$5-\$20 billion	-0.19	2	NA
>\$20 billion	NA	0	NA
All Banks	-0.36	288	-1.48

<sup>a</sup>Simple t tests for differences in means are given in these columns. The levels of significance are as follows: \*\*\* -- .01, \*\* -- .05, and \* -- .10. NA is indicated when the sample size of one group falls below 20 observations.

Table 42  
T Tests for Mean Changes in the  
Ratio of Small Business Loans Less Than \$250,000/Total Assets for  
Banks Not Acquired or Merged in the Period 1/1991- 12/1994<sup>a</sup>  
(in percent)

	Mean Change 6/93-6/94			Mean Change 6/94-6/95			Mean Change 6/93-6/95		
	Change	N	t Statistic	Change	N	t Statistic	Change	N	t Statistic
Total Assets	0.42	5,894	6.69***	-0.22	5,883	-4.70***	0.20	5,886	2.75***
<\$100 million	2.06	1,503	13.53***	0.08	1,499	0.85	2.14	1,499	13.00***
\$100-\$300 million	2.00	436	7.72***	0.13	435	1.12	2.14	435	7.81***
\$300 mil.-\$1 billion	0.60	169	2.47***	-0.02	169	-0.20	0.58	169	2.26***
\$1-\$5 billion	0.82	72	2.61***	0.06	72	0.28	0.88	72	2.87***
\$5-\$20 billion	0.18	20	1.24	0.01	20	0.17	0.19	20	1.27
>\$20 billion	0.81	8,094	14.51***	-0.13	8,078	-3.57***	0.67	8,081	10.66***
All Banks									

<sup>a</sup>Simple t tests for differences in means are given in these columns. The levels of significance are as follows: \*\*\* -- .01, \*\* -- .05, and \* -- .10. NA is indicated when the sample size of one group falls below 20 observations.

Table 43

Regression Analyses of the Determinants of the Change in the Small Business Loans/Total Assets Ratio Among Targets in Bank Acquisitions (in the second half of 1993) in the Period 6/30/93 to 6/30/95\*

Sample	A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets										Overall F	Adj. R <sup>2</sup>
	SBL/TA Target	NI/TA Target	Loss/TL Target	EQ/TA Target	TA Target	TA Buyer	HC	MBHC	State			
=123	1.95 (2.27**)	-0.01 (-0.31)	0.01 (0.43)	0.03 (0.13)	-0.22 (-3.24***)	-0.04 (-1.04)	-0.01 (-0.09)	-0.13 (-0.98)	-0.04 (-0.34)	6.80***	29.97	
Sample	B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets										Overall F	Adj. R <sup>2</sup>
	SBL/TA Target	NI/TA Target	Loss/TL Target	EQ/TA Target	TA Target	TA Buyer	HC	MBHC	State			
=123	1.72 (3.00***)	-0.01 (-0.50)	-0.001 (-0.05)	0.03 (0.28)	-0.19 (-4.18***)	-0.03 (-1.23)	0.02 (0.25)	-0.13 (-1.49)	-0.04 (-0.52)	10.48***	41.17	
Sample	C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets										Overall F	Adj. R <sup>2</sup>
	SBL/TA Target	NI/TA Target	Loss/TL Target	EQ/TA Target	TA Target	TA Buyer	HC	MBHC	State			
=123	1.40 (2.83***)	-0.02 (-1.04)	-0.01 (-0.50)	0.04 (0.36)	-0.14 (-3.43***)	-0.03 (-1.24)	0.01 (0.18)	-0.07 (-0.99)	-0.13 (-1.66*)	7.23***	31.50	

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1995 divided by the ratio of small business loans to total assets as of June 30, 1993 for the targets of bank acquisitions. All independent variables are based on June 30, 1993 data, where SBL/TA is small business loans to total assets, NI/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, and state is a dummy variable defined as 1 if the acquisition is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

Table 44

Regression Analyses of the Determinants of the Change in the Small Business Loans/Total Assets Ratio Among Targets in Bank Acquisitions (in the second half of 1993) in the Period 6/30/93 to 6/30/96\*

A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets													
Sample	Intercept	SBL/TA		NI/TA		Loss/TL		EQ/TA		TA		Overall F	Adj.
		Target		Target		Target		Target		Buyer	HC		
n=106	1.50 (1.51)	-0.54 (-4.83***)	-0.01 (-0.21)	-0.01 (-0.28)	-0.03 (-0.15)	-0.11 (-1.32)	-0.13 (-3.08***)	-0.11 (-0.56)	-0.15 (-0.92)	-0.01 (-0.06)	7.18***	34.4	
B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets													
Sample	Intercept	SBL/TA		NI/TA		Loss/TL		EQ/TA		TA		Overall F	Adj.
		Target		Target		Target		Target		Buyer	HC		
n=106	1.55 (2.33**)	-0.46 (-6.18***)	-0.02 (-0.76)	-0.01 (-0.63)	-0.03 (-0.20)	-0.13 (-2.35**)	-0.11 (-3.70***)	0.03 (0.24)	-0.11 (-1.05)	-0.02 (-0.23)	11.71***	47.7	
C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets													
Sample	Intercept	SBL/TA		NI/TA		Loss/TL		EQ/TA		TA		Overall F	Adj.
		Target		Target		Target		Target		Buyer	HC		
n=106	1.06 (1.83*)	-0.37 (-5.68***)	-0.05 (-1.52)	-0.01 (-0.48)	-0.03 (-0.21)	-0.10 (-2.10**)	-0.06 (-2.65***)	-0.03 (-0.32)	0.01 (0.18)	-0.07 (-0.78)	8.06***	37.	

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1996 divided by the ratio of small business loans to total assets as of June 30, 1993 for the targets of bank acquisitions. All independent variables are based on June 30, 1993 data, where SBL/TA is small business loans to total assets, NI/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, and state is a dummy variable defined as 1 if the acquisition is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* -- .01, \*\* -- .05, and \* -- .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

Table 45

Regression Analyses of the Determinants of the Change in the Small Business Loans/Total Assets Ratio Among Targets in Bank Acquisitions (in the second half of 1994) in the Period 6/30/94 to 6/30/95\*

Sample	A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets											
	Intercept	SBL/TA Target	NI/TA Target	Loss/TL Target	EQ/TA Target	TA Target	Buyer	HC	MBHC	State	Overall F Adj.	
164	0.19 (0.34)	-0.28 (-5.38***)	0.01 (0.22)	0.01 (1.06)	-0.04 (-0.29)	-0.03 (-0.81)	-0.04 (-1.89*)	0.18 (1.88*)	-0.01 (-0.19)	-0.11 (-1.25)	4.53***	16.3
Sample	B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets											
	Intercept	SBL/TA Target	NI/TA Target	Loss/TL Target	EQ/TA Target	TA Target	Buyer	HC	MBHC	State	Overall F Adj.	
164	0.20 (0.46)	-0.22 (-5.45***)	0.01 (0.63)	0.01 (1.38)	-0.05 (-0.50)	-0.04 (-1.37)	-0.02 (-1.17)	0.08 (1.15)	0.01 (0.13)	-0.05 (-0.81)	4.49***	16.1
Sample	C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets											
	Intercept	SBL/TA Target	NI/TA Target	Loss/TL Target	EQ/TA Target	TA Target	Buyer	HC	MBHC	State	Overall F Adj.	
164	-0.02 (-0.06)	-0.15 (-4.61***)	0.01 (0.74)	0.01 (1.07)	-0.11 (-1.26)	-0.03 (-1.54)	-0.003 (-0.26)	0.01 (0.15)	-0.01 (-0.09)	0.04 (0.69)	3.23***	10.9

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1995 divided by the ratio of small business loans to total assets as of June 30, 1994 for the targets of bank acquisitions. All independent variables are based on June 30, 1994 data, where SBL/TA is small business loans to total assets, NI/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, and state is a dummy variable defined as 1 if the acquisition is interstate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* -- .01, \*\* -- .05, and \* -- .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

Table 46

Regression Analyses of the Determinants of the Change in the Small Business Loans/Total Assets Ratio Among Targets in Bank Acquisitions (in the second half of 1994) in the Period 6/30/94 to 6/30/96\*

Sample	A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets										
	SBL/TA Target	NI/TA Target	Loss/TL Target	EQ/TA Target	TA Target	Buyer TA	HC Target	MBHC Target	State	Overall F	Adj.
146	-0.22 (-0.36)	-0.01 (-0.36)	-0.001 (-0.11)	0.09 (0.48)	-0.01 (-0.19)	-0.03 (-1.16)	-0.01 (-0.17)	0.06 (0.57)	0.14 (1.28)	5.14***	20.4
Sample	B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets										
	SBL/TA Target	NI/TA Target	Loss/TL Target	EQ/TA Target	TA Target	Buyer TA	HC Target	MBHC Target	State	Overall F	Adj.
146	-0.03 (-0.08)	-0.02 (-0.92)	0.01 (0.82)	0.06 (0.44)	-0.02 (-0.67)	-0.03 (-1.33)	-0.002 (-0.03)	0.01 (0.16)	0.15 (1.98**)	8.02***	30.3
Sample	C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets										
	SBL/TA Target	NI/TA Target	Loss/TL Target	EQ/TA Target	TA Target	Buyer TA	HC Target	MBHC Target	State	Overall F	Adj.
146	0.33 (0.84)	-0.01 (-0.42)	0.01 (1.23)	0.16 (1.23)	-0.01 (-0.51)	-0.01 (-0.59)	0.05 (0.75)	-0.08 (-1.27)	0.13 (1.83*)	5.31***	21.1

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1996 divided by the ratio of small business loans to total assets as of June 30, 1994 for the targets of bank acquisitions. All independent variables are based on June 30, 1994 data, where SBL/TA is small business loans to total assets, NI/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, and state is a dummy variable defined as 1 if the acquisition is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* -- .01, \*\* -- .05, and \* -- .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

Table 47

Regression Analyses of the Determinants of the Change in the Business Loans/Total Assets Ratio Among Targets and Buyers in Bank Mergers and Acquisitions (in the second half of 1993) in the Period 6/30/93-6/30/95\*

A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets											
Sample	Intercept	SBL/TA Aggregate	NIT/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=540	0.18 (0.58)	-0.51 (-14.15***)	-0.01 (-0.73)	-0.01 (-1.40)	0.01 (0.11)	-0.12 (-7.55***)	-0.11 (-1.75*)	-0.07 (-1.27)	-0.08 (-1.12)	27.52***	28.25
B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets											
Sample	Intercept	SBL/TA Aggregate	NIT/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=540	0.31 (1.52)	-0.37 (-15.48***)	-0.01 (-0.53**)	-0.01 (-1.10)	0.07 (1.08)	-0.08 (-7.89***)	-0.07 (-1.85*)	-0.08 (-2.38**)	-0.02 (-0.56)	34.76***	33.38
C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets											
Sample	Intercept	SBL/TA Aggregate	NIT/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=540	0.42 (2.58**)	-0.22 (-11.54***)	-0.03 (-3.12***)	0.001 (0.22)	0.06 (1.13)	-0.06 (-7.43***)	-0.05 (-1.48)	-0.11 (-3.79***)	-0.03 (-0.97)	25.69***	26.82

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1995 divided by the ratio of small business loans to total assets as of June 30, 1993 for the aggregate organization before and after the structural change. All independent variables are based on June 30, 1993 data, where SBL/TA is small business loans to total assets, NIT/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, and state is a dummy variable defined as 1 if the merger or acquisition is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used, which are aggregate data of buyers and targets both before and after the structural change. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

Table 48

Regression Analyses of the Determinants of the Change in the Business Loans/Total Assets Ratio Among Targets and Buyers in Bank Mergers and Acquisitions (in the second half of 1993) in the Period 6/30/93-6/30/96<sup>a</sup>

A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets											
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=505	-0.05 (-0.16)	-0.53 (-13.71***)	-0.04 (-1.82*)	-0.02 (-2.86***)	-0.09 (-0.90)	-0.14 (-8.77***)	-0.06 (-1.01)	-0.03 (-0.63)	-0.03 (-0.49)	25.87***	28.31
B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets											
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=505	0.39 (1.81*)	-0.39 (-14.66***)	-0.03 (-2.04**)	-0.01 (-1.97**)	0.04 (0.62)	-0.11 (-9.68***)	-0.03 (-0.75)	-0.04 (-1.21)	-0.03 (-0.72)	31.65***	32.73
C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets											
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=505	0.73 (3.71***)	-0.21 (-9.13***)	-0.05 (-3.85***)	0.001 (0.09)	0.06 (1.03)	-0.08 (-8.42***)	-0.04 (-1.08)	-0.07 (-2.07**)	-0.09 (-2.06**)	20.49***	23.63

<sup>a</sup>The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1996 divided by the ratio of small business loans to total assets as of June 30, 1993 for the aggregate organization before and after the structural change. All independent variables are based on June 30, 1993 data, where SBL/TA is small business loans to total assets, NI/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the merger or acquisition is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used, which are aggregate data of buyers and targets both before and after the structural change. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.



Table 49

Regression Analyses of the Determinants of the Change in the Business Loans/Total Assets Ratio Among Targets and Buyers in Bank Acquisitions (in the second half of 1993) in the Period 6/30/93-6/30/95\*

A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	NIT/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=310	-0.17 (-0.38)	-0.42 (-8.76***)	-0.08 (-1.89*)	-0.01 (-0.51)	-0.17 (-1.37)	-0.13 (-7.08***)	-0.02 (-0.37)	0.01 (0.07)	-0.04 (-0.52)	14.10***	25.34	
B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	NIT/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=310	-0.03 (-0.10)	-0.35 (-11.18***)	-0.04 (-1.19)	-0.01 (-1.01)	-0.10 (-1.23)	-0.09 (-7.92***)	-0.004 (-0.10)	-0.03 (-0.81)	0.01 (0.22)	21.39***	34.56	
C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	NIT/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=310	0.05 (0.27)	-0.23 (-10.01***)	-0.05 (-2.58**)	-0.003 (-0.65)	-0.04 (-0.77)	-0.06 (-7.59***)	0.01 (0.23)	-0.06 (-1.79*)	0.01 (0.35)	20.51***	33.56	

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1995 divided by the ratio of small business loans to total assets as of June 30, 1993 for the aggregate organization before and after the structural change. All independent variables are based on June 30, 1993 data, where SBL/TA is small business loans to total assets, NIT/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the acquisition is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used, which are aggregate data of buyers and targets both before and after the structural change. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

Table 50  
 Regression Analyses of the Determinants of the Change in the Business Loans/Total Assets Ratio  
 Among Targets and Buyers in Bank Acquisitions (in the second half of 1993) in the Period 6/30/93-6/30/96\*

A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	N/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=299	-0.23 (-0.53)	-0.48 (-9.63***)	-0.01 (-0.19)	-0.02 (-1.97*)	-0.32 (-2.46**)	-0.15 (-8.02***)	-0.02 (-0.40)	0.07 (1.02)	0.07 (0.90)	16.31***	29.14	
B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	N/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=299	0.18 (0.64)	-0.38 (-11.51***)	-0.01 (-0.44)	-0.01 (-1.63)	-0.14 (-1.59)	-0.12 (-9.58***)	0.01 (0.19)	0.03 (0.65)	0.04 (0.87)	24.16***	38.34	
C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	N/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=299	0.52 (2.09**)	-0.23 (-8.21***)	-0.05 (-1.73*)	0.001 (0.16)	-0.06 (-0.82)	-0.09 (-8.89***)	0.02 (0.49)	0.01 (0.13)	-0.01 (-0.29)	17.92***	31.24	

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1996 divided by the ratio of small business loans to total assets as of June 30, 1993 for the aggregate organization before and after the structural change. All independent variables are based on June 30, 1993 data, where SBL/TA is small business loans to total assets, N/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the acquisition is intrastate and 0 for interstate structural change. The Logarithmic transformations of continuous variables are used, which are aggregate data of buyers and targets both before and after the structural change. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

Table 51

Regression Analyses of the Determinants of the Change in the Business Loans/Total Assets Ratio Among Targets and Buyers in Bank Mergers (in the second half of 1993) in the Period 6/30/93-6/30/95\*

A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	N/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=230	-0.03 (-0.05)	-0.67 (-11.21***)	0.01 (0.22)	-0.01 (-0.87)	0.36 (2.19**)	-0.11 (-4.32***)	-0.27 (-2.33**)	-0.08 (-1.01)	0.78 (1.95*)	18.69***	38.20	
B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	N/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=230	0.16 (0.41)	-0.44 (-11.03***)	0.002 (0.12)	0.003 (0.31)	0.39 (3.53***)	-0.06 (-3.72***)	-0.23 (-3.02***)	-0.07 (-1.30)	0.74 (2.76***)	19.84***	39.70	
C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	N/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=230	0.49 (1.42)	-0.26 (-7.34***)	-0.03 (-1.93*)	0.01 (1.48)	0.25 (2.57**)	-0.06 (-3.65***)	-0.19 (-2.80***)	-0.11 (-2.19**)	0.43 (1.82*)	10.52***	24.97	

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1995 divided by the ratio of small business loans to total assets as of June 30, 1993 for the aggregate organization before and after the structural change. All independent variables are based on June 30, 1993 data, where SBL/TA is small business loans to total assets, N/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, and state is a dummy variable defined as 1 if the merger is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used, which are aggregate data of buyers and targets both before and after the structural change. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* -- .01, \*\* -- .05, and \* -- .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

Table 52

Regression Analyses of the Determinants of the Change in the Business Loans/Total Assets Ratio Among Targets and Buyers in Bank Mergers (in the second half of 1993) in the Period 6/30/93-6/30/96\*

A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets											
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=206	-0.16 (-0.26)	-0.67 (-10.30***)	-0.05 (-1.71*)	-0.02 (-1.41)	0.40 (2.22**)	-0.14 (-4.63***)	-0.06 (-0.05)	-0.05 (-0.59)	0.77 (1.83*)	15.32***	35.86
B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets											
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=206	0.06 (0.14)	-0.44 (-9.92***)	-0.03 (-1.64)	-0.003 (-0.27)	0.40 (3.25***)	-0.08 (-4.26***)	-0.07 (-0.80)	-0.03 (-0.47)	0.74 (2.58**)	15.06***	35.44
C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets											
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=206	0.49 (1.20)	-0.23 (-5.44***)	-0.05 (-2.74***)	0.01 (0.76)	0.28 (2.38**)	-0.06 (-3.28***)	-0.14 (-1.74*)	-0.05 (-0.90)	0.43 (1.56)	6.32***	17.20

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1996 divided by the ratio of small business loans to total assets as of June 30, 1993 for the aggregate organization before and after the structural change. All independent variables are based on June 30, 1993 data, where SBL/TA is small business loans to total assets, NI/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the merger is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used, which are aggregate data of buyers and targets both before and after the structural change. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

Table 53

Regression Analyses of the Determinants of the Change in the Business Loans/Total Assets Ratio Among Targets and Buyers in Bank Mergers and Acquisitions (in the second half of 1994) in the Period 6/30/94-6/30/95\*

Sample	A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets									
	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=607	-0.18 (-6.60***)	0.01 (0.57)	0.001 (0.25)	-0.04 (-0.49)	-0.03 (-2.73***)	0.001 (0.01)	-0.08 (-1.89*)	-0.06 (-1.16)	6.18***	6.41
Sample	B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets									
	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=607	-0.16 (-8.19***)	0.0002 (0.04)	0.04 (0.66)	0.03 (0.50)	-0.03 (-3.48***)	0.001 (0.04)	-0.06 (-1.89*)	-0.08 (-1.99**)	9.77***	10.38
Sample	C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets									
	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=607	-0.10 (-5.79***)	-0.002 (-0.16)	0.003 (0.93)	0.11 (2.09**)	-0.02 (-3.33***)	0.01 (0.32)	-0.06 (-2.40**)	-0.08 (-2.38**)	7.46***	7.86

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1995 divided by the ratio of small business loans to total assets as of June 30, 1994 for the aggregate organization before and after the structural change. All independent variables are based on June 30, 1994 data, where SBL/TA is small business loans to total assets, NI/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the merger or acquisition is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used, which are aggregate data of buyers and targets both before and after the structural change. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

Table 54

Regression Analyses of the Determinants of the Change in the Business Loans/Total Assets Ratio  
Among Targets and Buyers in Bank Mergers and Acquisitions (in the second half of 1994) in the Period 6/30/94-6/30/96\*

A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets													
Sample	Intercept	SBL/TA		NI/TA		Loss/TL		EQ/TA		TA		Overall F	Adj. R <sup>2</sup>
		Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate		
n=584	0.02 (0.08)	-0.27 (-8.17***)	0.04 (2.11**)	-0.004 (-0.70)	0.18 (1.75*)	-0.01 (-0.89)	-0.02 (-0.48)	-0.07 (-1.36)	0.07 (1.07)	10.79***	11.85		
B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets													
Sample	Intercept	SBL/TA		NI/TA		Loss/TL		EQ/TA		TA		Overall F	Adj. R <sup>2</sup>
		Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate		
n=584	0.21 (0.98)	-0.24 (-10.20***)	0.02 (1.48)	-0.01 (-1.40)	0.13 (1.81*)	-0.03 (-2.75***)	-0.04 (-1.01)	-0.05 (-1.33)	-0.01 (-0.14)	15.22***	16.33		
C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets													
Sample	Intercept	SBL/TA		NI/TA		Loss/TL		EQ/TA		TA		Overall F	Adj. R <sup>2</sup>
		Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate	Aggregate		
n=584	0.45 (2.33**)	-0.17 (-8.05***)	0.004 (0.35)	-0.01 (-1.98**)	0.13 (2.03**)	-0.03 (-3.46***)	-0.03 (-0.99)	-0.08 (-2.54**)	-0.05 (-1.16)	11.15***	12.23		

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1996 divided by the ratio of small business loans to total assets as of June 30, 1994 for the aggregate organization before and after the structural change. All independent variables are based on June 30, 1994 data, where SBL/TA is small business loans to total assets, NI/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the merger or acquisition is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used, which are aggregate data of buyers and targets both before and after the structural change. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

**Regression Analyses of the Determinants of the Change in the Business Loans/Total Assets Ratio Among Targets and Buyers in Bank Acquisitions (in the second half of 1994) in the Period 6/30/94-6/30/95\***

**A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets**

Sample	Intercept	SBL/TA Aggregate	N/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=331	0.23 (0.72)	-0.10 (-3.25***)	0.06 (2.20**)	0.003 (0.49)	-0.14 (-1.50)	-0.03 (-2.64***)	-0.02 (-0.52)	0.09 (1.77*)	-0.01 (-0.28)	2.80***	4.19

**B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets**

Sample	Intercept	SBL/TA Aggregate	N/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=331	0.45 (1.97**)	-0.10 (-4.49***)	0.06 (2.63***)	0.001 (0.15)	-0.001 (-0.01)	-0.03 (-2.95***)	-0.02 (-0.59)	0.09 (2.41**)	-0.04 (-0.96)	4.72***	8.29

**C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets**

Sample	Intercept	SBL/TA Aggregate	N/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=331	0.91 (3.81***)	-0.06 (-2.71***)	0.05 (2.50**)	0.002 (0.58)	0.16 (2.56**)	-0.02 (-2.06**)	-0.001 (-0.01)	0.07 (2.00**)	-0.03 (-0.77)	3.87***	6.52

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1995 divided by the ratio of small business loans to total assets as of June 30, 1994 for the aggregate organization before and after the structural change. All independent variables are based on June 30, 1994 data, where SBL/TA is small business loans to total assets, N/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the acquisition is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used, which are aggregate data of buyers and targets both before and after the structural change. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* -- .01, \*\* -- .05, and \* -- .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

Table 56

Regression Analyses of the Determinants of the Change in the Business Loans/Total Assets Ratio Among Targets and Buyers in Bank Acquisitions (in the second half of 1994) in the Period 6/30/94-6/30/96\*

A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=324	-0.24 (-0.63)	-0.25 (-6.32***)	0.09 (2.48**)	0.01 (0.83)	-0.09 (-0.84)	-0.02 (-1.16)	-0.05 (-0.96)	0.03 (0.59)	0.16 (2.12**)	6.21***	11.44	
B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=324	0.19 (0.73)	-0.22 (-7.93***)	0.09 (3.53***)	0.001 (0.21)	-0.01 (-0.19)	-0.02 (-2.21**)	-0.05 (-1.32)	0.05 (1.10)	0.04 (1.38)	10.00***	18.23	
C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=324	0.71 (2.77)	-0.15 (-5.87***)	0.09 (3.87***)	-0.004 (-0.88)	0.04 (0.63)	-0.03 (-3.05***)	-0.03 (-0.94)	0.04 (1.00)	0.01 (0.20)	7.17***	13.27	

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1996 divided by the ratio of small business loans to total assets as of June 30, 1994 for the aggregate organization before and after the structural change. All independent variables are based on June 30, 1994 data, where SBL/TA is small business loans to total assets, NI/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the acquisition is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used, which are aggregate data of buyers and targets both before and after the structural change. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* -- .01, \*\* -- .05, and \* -- .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.



Table 57

Regression Analyses of the Determinants of the Change in the Business Loans/Total Assets Ratio Among Targets and Buyers in Bank Mergers (in the second half of 1994) in the Period 6/30/94-6/30/95\*

A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=276	0.16 (0.33)	-0.33 (-6.71***)	0.01 (0.76)	-0.003 (-0.37)	0.08 (0.52)	-0.06 (-2.57**)	0.08 (1.05)	-0.16 (-2.41**)	-0.04 (-0.14)	6.99***	14.85	
B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=276	0.35 (0.98)	-0.27 (-7.79***)	0.01 (0.82)	-0.002 (-0.43)	0.06 (0.57)	-0.06 (-3.65***)	0.06 (0.96)	-0.14 (-3.02***)	-0.06 (-0.28)	9.26***	19.38	
C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets												
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>	
n=276	0.41 (1.35)	-0.20 (-6.75***)	-0.01 (-0.36)	0.001 (0.15)	-0.04 (-0.43)	-0.07 (-4.84***)	0.04 (0.79)	-0.14 (-3.52***)	-0.12 (-0.64)	8.27***	17.46	

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1995 divided by the ratio of small business loans to total assets as of June 30, 1994 for the aggregate organization before and after the structural change. All independent variables are based on June 30, 1994 data, where SBL/TA is small business loans to total assets, NI/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the merger is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used, which are aggregated data of buyers and targets both before and after the structural change. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

Table 58

Regression Analyses of the Determinants of the Change in the Business Loans/Total Assets Ratio Among Targets and Buyers in Bank Mergers (in the second half of 1994) in the Period 6/30/94-6/30/96\*

A. Dependent Variable: Business Loans Less Than \$100,000/Total Assets											
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=260	0.33 (0.53)	-0.37 (-5.94***)	0.05 (1.91*)	-0.02 (-2.04**)	0.53 (2.85***)	-0.02 (-0.71)	0.08 (0.75)	-0.08 (-0.90)	0.25 (0.65)	8.14***	18.09
B. Dependent Variable: Business Loans Less Than \$250,000/Total Assets											
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=260	0.35 (0.79)	-0.33 (-7.47***)	0.01 (0.88)	-0.02 (-2.58**)	0.27 (2.07**)	-0.05 (-2.55**)	0.01 (0.19)	-0.06 (-1.07)	0.10 (0.38)	9.52***	20.84
C. Dependent Variable: Business Loans Less Than \$1,000,000/Total Assets											
Sample	Intercept	SBL/TA Aggregate	NI/TA Aggregate	Loss/TL Aggregate	EQ/TA Aggregate	TA Aggregate	HC	MBHC	State	Overall F	Adj. R <sup>2</sup>
n=260	0.36 (0.99)	-0.23 (-6.26***)	-0.01 (-0.71)	-0.01 (-2.58**)	0.17 (1.62)	-0.05 (-2.83***)	0.01 (0.08)	-0.13 (-2.56**)	0.04 (0.20)	7.77***	17.30

\*The dependent variable is the natural logarithm of the ratio of small business loans (i.e., total business and commercial real estate loans) to total assets as of June 30, 1996 divided by the ratio of small business loans to total assets as of June 30, 1994 for the aggregate organization before and after the structural change. All independent variables are based on June 30, 1994 data, where SBL/TA is small business loans to total assets, NI/TA is net income after taxes to total assets, Loss/TL is total loan losses minus recoveries/total loans, EQ/TA is total equity capital/total assets, TA is total assets, HC is a dummy variable defined as 1 if the target bank is a member of a multibank holding company and 0 otherwise, MBHC is a dummy variable defined as 1 if the merger is intrastate and 0 for interstate structural changes. Logarithmic transformations of continuous variables are used, which are aggregate data of buyers and targets both before and after the structural change. The regression coefficients (and t statistics) are shown with asterisks that correspond to the following levels of significance: \*\*\* - .01, \*\* - .05, and \* - .10. The overall F and adjusted R<sup>2</sup> provide information on the goodness of fit of the regression model.

Table 59

**Perceived Importance of the Goals of Mergers or Acquisitions**  
(percentage response by bank type)

Motivation for Merger or Acquisition	Buyers in Acquisitions, N = 31			Targets in Acquisitions, N = 46			Buyers in Mergers, N = 48			Targets in Mergers, N = 31		
	Very Important	Moderately Important	Least Important	Very Important	Moderately Important	Least Important	Very Important	Moderately Important	Least Important	Very Important	Moderately Important	Least Important
1. Market Share	30.00%	43.33%	26.67%	31.82%	36.36%	31.82%	39.58%	33.33%	27.08%	35.48%	41.94%	22.58%
2. Gain Entry into a New Bank Market	59.38	12.50	28.13	29.55	27.09	43.18	46.81	23.40	29.79	26.67	20.00	53.33
3. Operating Efficiency	30.30	45.45	24.24	25.00	50.00	25.00	56.52	23.91	19.57	62.50	21.88	15.63
4. Profitability	50.00	34.38	15.63	47.73	38.64	13.64	72.92	18.75	8.33	51.52	33.33	15.15
5. Risk Management	19.35	51.61	29.03	22.73	54.55	22.73	18.18	47.73	34.09	19.35	35.48	45.16
6. Geographic Diversification of Assets	38.71	32.26	29.03	15.91	36.36	47.73	20.45	43.18	36.36	3.23	35.48	61.29
7. Array of Financial Services	9.68	48.39	41.94	19.51	48.78	31.71	12.20	26.83	60.98	13.79	37.93	48.28

Table 60

**Perceived Importance of the Results of Mergers or Acquisitions  
(percentage response by bank type)**

Results After Merger or Acquisition	Buyers in Acquisitions, N = 31			Targets in Acquisitions, N = 46			Buyers in Mergers, N = 48			Targets in Mergers, N = 31		
	Very Important	Moderately Important	Least Important	Very Important	Moderately Important	Least Important	Very Important	Moderately Important	Least Important	Very Important	Moderately Important	Least Important
1. Market Share	43.33%	36.67%	20.00%	28.26%	52.17%	19.57%	45.45%	36.36%	18.18%	48.28%	41.38%	10.34%
2. Gain Entry into a New Bank Market	59.38	18.75	21.88	34.04	31.91	34.04	50.00	22.73	27.27	33.33	22.22	44.44
3. Operating Efficiency	46.88	37.50	15.63	51.66	34.04	14.89	55.81	34.88	9.30	66.67	23.33	10.00
4. Profitability	58.06	32.26	9.68	59.57	27.66	12.77	68.89	24.44	6.67	53.33	40.00	6.67
5. Risk Management	25.81	48.39	25.81	34.04	48.94	17.02	14.63	53.66	31.71	35.71	32.14	32.14
6. Geographic Diversification of Assets	35.48	38.71	25.81	27.66	31.91	40.43	21.95	43.90	34.15	10.71	39.29	50.00
7. Array of Financial Services	25.81	38.71	35.48	31.82	36.36	31.82	20.51	30.77	48.72	37.04	22.22	40.74

Table 61

**Perceived Effects of Mergers or Acquisitions on Bank Assets Portfolio**  
(percentage response by bank type)

Asset Type	Buyers in Acquisitions, N = 39			Targets in Acquisitions, N = 55			Buyers in Mergers, N = 50			Targets in Mergers, N = 36		
	Increased	No Effect	Decreased	Increased	No Effect	Decreased	Increased	No Effect	Decreased	Increased	No Effect	Decreased
1. Small Business Loans <\$250,000	53.85%	38.46%	7.69%	45.45%	45.45%	9.09%	76.00%	16.00%	8.00%	55.56%	36.11%	8.33%
2. Medium Business Loans \$250,000-\$1 Million	48.65	40.54	10.81	48.15	50.00	1.85	61.22	32.65	6.12	41.67	52.78	5.56
3. Large Business Loans >\$1 Million	19.44	69.44	11.11	43.40	54.72	1.89	31.91	59.57	8.51	30.56	61.11	8.33
4. Commercial Real Estate Loans	58.97	35.90	5.13	52.73	45.45	1.82	59.18	30.61	10.20	52.78	38.89	8.33
5. Residential Real Estate Loans	51.28	43.59	5.13	53.70	44.44	1.85	57.14	28.57	14.29	63.89	27.78	8.33
6. Credit Cards	29.41	64.71	5.88	37.04	57.41	5.56	42.55	51.06	6.38	39.39	57.58	3.03
7. Other Consumer Credit	43.59	51.28	5.13	48.15	42.59	9.26	65.31	32.65	2.04	54.29	40.00	5.71
8. Agricultural Loans (Including Real Estate)	39.47	50.00	10.53	26.42	64.15	9.43	36.00	58.00	6.00	33.33	61.11	5.56
9. Government Securities (Including Munis)	25.64	61.54	12.82	24.07	53.70	22.22	41.67	41.67	16.67	14.29	65.71	20.00
10. Other Securities	15.79	68.42	15.79	9.26	64.81	25.93	29.17	54.17	16.67	9.09	69.70	21.21

Table 62

Perceived Effects of Credit Decision Criteria on Small Business Lending Before Mergers or Acquisitions  
(percentage response by bank type)

Credit Decision Criteria	Buyers in Acquisition, N = 33			Targets in Acquisitions, N = 51			Buyers in Mergers, N = 48			Targets in Mergers, N = 29		
	Very Important	Moderately Important	Least Important	Very Important	Moderately Important	Least Important	Very Important	Moderately Important	Least Important	Very Important	Moderately Important	Least Important
1. Cash Flow of Borrowing Firm	69.70%	27.27%	3.03%	56.86%	31.37%	11.76%	81.25%	8.33%	10.42%	51.72%	34.48%	13.79%
2. Financial Ratios of Borrowing Firm	51.52	42.42	6.06	39.22	45.10	15.69	52.08	39.58	8.33	35.71	50.00	14.29
3. Collateral	75.76	21.21	3.03	65.38	26.92	7.69	70.83	20.83	8.33	58.62	31.03	10.34
4. Appraisals of Borrower's Assets	57.58	36.36	6.06	39.22	50.98	9.80	45.83	45.83	8.33	48.28	34.48	17.24
5. Documentation Requirements	66.67	30.30	3.03	38.46	51.92	9.62	52.08	41.67	6.25	50.00	35.71	14.29
6. Managerial Expertise	69.70	27.27	3.03	46.15	42.31	11.54	58.33	37.50	4.17	58.62	34.48	6.90
7. Character of Managers	72.73	21.21	6.06	73.08	17.31	9.62	79.17	16.67	4.17	75.00	17.86	7.14
8. Credit Scoring Models	7.14	35.71	57.14	8.16	18.37	73.47	8.89	20.00	71.11	16.00	24.00	60.00
9. Centralized Credit Review	30.00	33.33	36.66	12.00	28.00	60.00	23.40	29.79	46.81	25.93	37.04	37.04
10. Personal Relationship Between the Firm and the Bank	69.70	21.21	9.09	60.00	30.00	10.00	54.17	35.42	10.42	62.07	34.48	3.45

Table 63

**Perceived Effects of Credit Decision Criteria on Small Business Lending After Mergers or Acquisitions**  
(percentage response by bank type)

Credit Decision Criteria	Buyers in Acquisitions, N = 33			Targets in Acquisitions, N = 52			Buyers in Mergers, N = 47			Targets in Mergers, N = 29		
	Very Important	Moderately Important	Least Important	Very Important	Moderately Important	Least Important	Very Important	Moderately Important	Least Important	Very Important	Moderately Important	Least Important
1. Cash Flow of Borrowing Firm	87.88%	6.06%	6.06%	78.85%	13.46%	7.69%	91.49%	2.13%	6.38%	86.21%	10.34%	3.45%
2. Financial Ratio of Borrowing Firm	75.76	18.18	6.06	61.54	32.69	5.77	65.96	29.79	4.26	78.57	21.43	0.00
3. Collateral	81.82	12.12	6.06	59.62	32.69	7.69	72.34	23.40	4.26	58.62	34.48	6.90
4. Appraisals of Borrower's Assets	66.67	27.27	6.06	47.06	45.10	7.84	40.43	46.81	12.77	68.97	24.14	6.90
5. Documentation Requirements	81.82	15.15	3.03	59.62	30.77	9.62	61.70	34.04	4.26	78.57	17.86	3.57
6. Managerial Expertise	84.85	12.12	3.03	61.54	30.77	7.69	68.09	29.79	2.13	72.41	27.59	0.00
7. Characters of Managers	84.85	12.12	3.03	71.15	19.23	9.62	76.60	17.02	6.38	71.43	25.00	3.57
8. Credit Scoring Models	25.00	28.57	46.43	16.33	22.45	61.22	20.45	20.45	59.09	32.00	32.00	36.00
9. Centralized Credit	33.33	43.33	23.33	31.37	31.37	37.25	36.96	28.26	34.78	51.85	40.74	7.41
10. Personal Relationship Between the Firm and the Bank	66.67	30.30	3.03	44.00	44.00	12.00	59.57	31.91	8.51	44.83	48.28	6.90

Perceived Effects of Mergers or Acquisitions on Various Aspects of Small Business Lending  
(percentage response by bank type)

	Buyers in Acquisitions, N=54			Buyers in Mergers, N=49			Targets in Mergers, N=36					
	Increased	No Change	Decreased	Increased	No Change	Decreased	Increased	No Change	Decreased			
1. Profitability	27.03%	64.86%	8.11%	27.78%	59.26%	12.96%	32.65%	61.22%	6.12%	44.44%	47.22%	8.33%
2. Risk of Default	8.11	72.97	18.92	10.91	72.73	16.36	10.20	73.47	16.33	19.44	52.78	27.78
3. Dollar Amount of Small Business Loans Compared to Total Business Loans	48.65	48.65	2.70	41.82	47.27	10.91	53.06	38.78	8.16	44.44	47.22	8.33
4. Number of Small Business Loans Compared to Total Number of Small Business Loans	48.65	48.65	2.70	38.18	52.73	9.09	55.10	42.86	2.04	42.86	48.57	8.57
5. Average Loan Size of Small Business Loans	32.43	64.86	2.70	41.82	56.36	1.82	24.49	65.31	10.20	31.43	62.86	5.71
6. Interest Rates Charged on Loans	13.51	78.38	8.11	9.09	74.55	16.36	12.24	73.47	14.29	11.11	58.33	30.56
7. Loan Fees Charged to Borrowers	29.73	64.86	5.41	32.73	67.27	0.00	18.37	79.59	2.04	38.89	47.22	13.89
8. Approval Rate of Loan Applications	13.51	86.49	0.00	21.82	67.27	10.91	12.50	72.92	14.58	25.00	52.78	22.22
9. Retention of Old Customers	21.62	75.68	2.70	16.36	74.55	9.09	14.58	66.67	18.75	22.22	61.11	16.67
10. Promotion of Small Business Loans (or marketing)	40.54	59.46	0.00	43.64	52.73	3.64	42.86	55.10	2.04	50.00	44.44	5.56
11. Time it Takes to Process a Small Business Loan Application	10.81	72.97	16.22	27.27	54.55	18.18	12.24	69.39	18.37	33.33	41.67	25.00
12. Offering of Related Services to Small Business	51.43	48.57	0.00	60.00	40.00	0.00	52.08	47.92	0.00	61.11	36.11	2.78
13. Offering of New Small Business Loan Programs	34.29	65.71	0.00	38.18	61.82	0.00	47.92	52.08	0.00	52.78	41.67	5.56
14. Costs of Processing Small Business Loan Applications	20.00	62.86	17.14	21.15	71.15	7.69	10.42	75.00	14.58	15.15	57.58	27.27



Table 65

Means of the Perceived Importance of the Goals of Mergers or Acquisitions  
Student-T Tests Between Bank Groups

Motivation for Merger or Acquisition	Means (Range 1-10)				Student-T Between (1) and (2)	Student-T Between (1) and (3)	Student-T Between (1) and (4)	Student-T Between (2) and (3)	Student-T Between (2) and (4)	Student-T Between (3) and (4)
	(1) Buyer in Acquisition N = 31	(2) Target in Acquisition N = 46	(3) Buyer in Merger N = 48	(4) Target in Merger N = 31						
1. Market Share	5.73	5.32	6.02	5.84	0.55	0.38	0.12	1.07	0.70	0.80
2. Gain Entry into a New Bank Market	6.66	4.75	6.13	4.10	2.23**	0.64	2.86***	1.85*	0.79	0.01
3. Operating Efficiency	5.76	5.52	6.87	7.16	0.36	1.66*	1.90*	2.19**	2.37**	0.41
4. Profitability	7.09	6.57	8.17	7.12	0.78	1.73*	0.04	2.81***	0.81	1.67*
5. Risk Management	5.06	5.30	4.70	4.10	0.38	0.59	1.35	1.06	1.79*	0.90
6. Geographic Diversification	5.84	4.36	4.95	2.81	2.01**	1.19	4.37***	0.92	2.68***	3.62***
7. Array of Financial Services	4.32	4.83	3.34	3.86	0.75	1.50	0.64	2.33**	1.36	0.75

\*\*\* Significant at the 1 percent

\*\* Significant at the 5 percent

\* Significant at the 10 percent

Table 66

Means of the Perceived Effects of Mergers or Acquisitions  
Student-T Tests Between Bank Groups

Results of Merger or Acquisition	Means (Range 1-10)				Student-T Between (1) and (2)	Student-T Between (1) and (3)	Student-T Between (1) and (4)	Student-T Between (2) and (3)	Student -T Between (2) and (4)	Student-F Between (3) and (4)
	(1) Buyer in Acquisition N = 31	(2) Target in Acquisition N = 46	(3) Buyer in Merger N = 48	(4) Target in Merger N = 31						
1. Market Share	6.43	5.72	6.55	6.69	1.02	0.16	0.34	1.34	1.44	0.21
2. Gain Entry into a New Bank Market	6.78	5.38	6.34	4.74	1.76*	0.56	2.32**	1.33	0.78	1.97**
3. Operating Efficiency	6.72	6.60	7.19	7.50	0.19	0.73	1.16	1.06	1.52	0.53
4. Profitability	7.58	7.06	7.98	7.30	0.84	0.72	0.46	1.68*	0.39	1.26
5. Risk Management	5.39	5.89	4.76	5.32	0.81	1.03	0.08	2.02**	0.75	0.75
6. Geographic Diversification	5.90	4.91	5.05	3.68	1.35	1.15	2.96***	0.20	1.81*	1.96**
7. Array of Financial Services	4.94	5.34	4.05	4.93	0.55	1.19	0.01	1.88*	0.49	1.03

\*\*\* Significant at the 1 percent

\*\* Significant at the 5 percent

\* Significant at the 10 percent

Means of the Perceived Effects of Mergers or Acquisitions on Asset Portfolios  
Student-T Tests Between Bank Groups

Assets	Means (-1=Decreased, 0=No change, 1=Increased)				Student-T Between (1) and (2)	Student-T Between (1) and (3)	Student-T Between (1) and (4)	Student-T Between (2) and (3)	Student-T Between (2) and (4)	Student-T Between (3) and (4)
	(1) Buyer in Acquisition N = 39	(2) Target in Acquisition N = 55	(3) Buyer in Merger N = 50	(4) Target in Merger N = 36						
Small Business Loans <\$250,000	0.46	0.36	0.68	0.47	0.72	1.62	0.07	2.55***	0.78	1.48
Medium Business Loans \$250,000-\$1 Million	0.38	0.46	0.55	0.36	0.66	1.21	0.11	0.77	0.83	1.44
Large Business Loans > \$1 Million	0.08	0.42	0.23	0.22	2.81***	1.18	1.03	1.59	1.57	.09
Commercial Real Estate Loans	0.54	0.51	0.49	0.44	0.24	0.36	0.65	0.26	0.49	0.31
Residential Real Estate Loans	0.46	0.51	0.43	0.56	0.47	0.23	0.65	0.70	0.28	0.84
Credit Cards	0.24	0.31	0.36	0.36	0.64	0.97	0.95	0.40	0.39	0.01
Other Consumer Loans	0.38	0.39	0.63	0.49	0.03	2.05**	0.72	2.08**	0.71	1.15
Agricultural Loans (Including Real Estate)	0.29	0.17	0.30	0.28	0.90	0.08	0.08	1.39	0.87	0.18
Government Securities (Including Munis)	0.13	0.02	0.25	-0.06	0.81	0.85	1.32	1.64*	0.55	2.11**
Other Securities	0.00	0.01	0.07	0.06	1.38	0.93	0.24	2.34**	0.92	0.25

\*\*\* Significant at the 1 percent

\*\* Significant at the 5 percent

\* Significant at the 10 percent

Table 68

Means of the Perceived Importance of Credit Decision Process Before Merger or Acquisition  
Student-T Tests Between Bank Groups

Credit Decision Process	Means (1=Unimportant, 10=Extremely Important)				Student-T Between (1) and (2)	Student-T Between (1) and (3)	Student-T Between (1) and (4)	Student-T Between (2) and (3)	Student-T Between (2) and (4)	Student-T Between (3) and (4)
	(1) Buyer Acquisition	(2) Target Acquisition	(3) Buyer Merger	(4) Target Merger						
Cash Flow of Borrowing Firm	8.39	7.35	8.52	7.03	1.88*	0.26	2.06**	2.09**	0.47	2.23**
Financial Ratios of Borrowing Firm	7.55	6.39	7.10	6.54	2.12**	0.83	1.66*	1.38	0.24	0.97
Collateral	8.12	7.79	7.85	7.07	0.68	0.53	1.81*	0.13	1.26	1.35
Appraisal of Borrowing Firm	7.27	6.49	6.85	6.41	1.52	0.83	1.49	0.72	0.13	0.78
Documentation Requirements	7.64	6.56	7.56	6.93	2.23**	0.15	1.22	2.13**	0.65	1.11
Managerial Expertise	8.09	6.98	7.48	7.28	2.26**	1.34	1.56	1.05	0.55	0.40
Character of Managers	8.09	7.88	8.35	8.04	0.35	0.48	0.09	0.95	0.26	0.59
Credit Scoring Models	3.43	2.76	2.82	3.36	1.09	0.91	0.09	0.12	0.85	0.73
Centralized Credit Reviews	4.87	3.30	4.45	4.37	2.31**	0.58	0.62	1.86*	1.53	0.10
Personal Relationship Between the Firm and the Bank	7.70	7.16	7.23	7.93	0.93	0.85	0.43	0.13	1.46	1.34

\*\*\* Significant at the 1 percent  
\*\* Significant at the 5 percent  
\* Significant at the 10 percent

Means of the Perceived Importance of Credit Decision Process After Merger or Acquisition  
Student-T Tests Between Bank Groups  
(Figures in parentheses are t tests for differences between the means before and after mergers and acquisitions in Tables 68 and 69)

Credit Decision Process	Means (-1 = Decreased, 0 = No change, 1 = Increased)				Student-T Between (1) and (2)	Student-T Between (1) and (3)	Student-T Between (1) and (4)	Student-T Between (2) and (3)	Student-T Between (2) and (4)	Student-T Between (3) and (4)
	(1) Buyer in Acquisition	(2) Target in Acquisition	(3) Buyer in Merger	(4) Target in Merger						
1. Cash Flow of Borrowing Firm	8.85 (1.76*)	8.42 (4.29***)	9.13 (1.95*)	8.90 (3.52***)	0.81	0.57	0.09	1.54	0.95	0.50
2. Financial Ratios of Borrowing Firm	8.21 (2.68***)	7.50 (4.28***)	7.64 (2.17**)	8.57 (4.01**)	1.46	1.19	0.78	0.32	2.62***	2.30***
3. Collateral	8.12 (0.00)	7.33 (-2.55***)	8.00 (0.00)	7.55 (0.89)	1.68*	0.26	1.05	1.51	0.43	0.87
4. Appraisal of Borrowing Firm	7.48 (1.02)	6.75 (-1.91*)	6.70 (-1.91*)	7.69 (2.14**)	1.43	1.50	0.38	0.09	1.84*	1.92*
5. Documentation Requirements	8.55 (3.21***)	7.35 (3.22***)	7.98 (1.27)	8.57 (3.96***)	2.56***	1.26	0.06	1.33	2.56***	1.29
6. Managerial Expertise	8.67 (3.21***)	7.58 (3.00***)	8.00 (1.27)	8.14 (3.96***)	2.24***	1.62	1.27	0.98	1.29	0.35
7. Character of Managers	8.76 (2.22**)	7.83 (-0.32)	8.26 (-1.01)	8.39 (0.75)	1.86*	1.04	0.71	0.84	1.05	0.26
8. Credit Scoring Models	4.25 (1.84*)	3.53 (2.18**)	3.70 (2.00**)	4.92 (2.13**)	0.98	0.70	0.73	0.26	1.71*	1.42
9. Centralized Credit Reviews	5.80 (2.16**)	4.94 (4.67***)	5.39 (1.76*)	7.11 (4.53***)	1.21	0.56	1.79*	0.67	3.23***	2.45**
10. Personal Relationship Between the Firm and the Bank	7.82 (0.39)	6.74 (-1.58)	7.49 (0.41)	7.17 (-1.61)	2.14**	0.66	1.14	1.43	0.74	0.54

\*\*\* Significant at the 1 percent

\*\* Significant at the 5 percent

\* Significant at the 10 percent

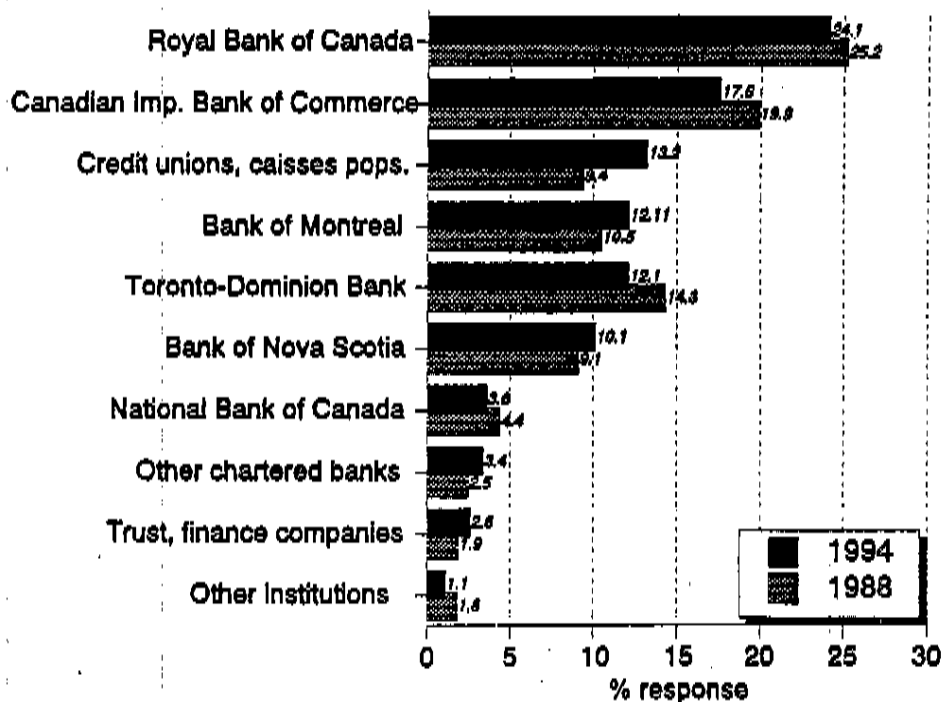
Table 10  
Means of the Perceived Effects of Mergers or Acquisitions on  
Various Aspects of Small Business Loans  
Student-t Tests of Between Bank Groups

Various Aspects of Small Business Loans	Means (-1=Decreased, 0=No change, 1=Increased)				Student-t Between (1) and (2)	Student-t Between (1) and (3)	Student-t Between (1) and (4)	Student-t Between (2) and (3)	Student-t Between (2) and (4)	Student-t Between (3) and (4)
	(1) Buyer in Acquisition N = 37	(2) Target in Acquisition N = 54	(3) Buyer in Merger N = 49	(4) Target in Merger N = 36						
Profitability	0.19	0.15	0.26	0.36	0.32	0.61	1.21	0.99	1.56	0.48
Risk of Default	-0.11	-0.05	-0.06	-0.08	0.49	0.42	0.17	0.06	0.21	0.87
Dollar Amount of Small Business Loans as a Proportion of Total Business Loans	0.46	0.31	0.45	0.36	1.17	.08	0.70	1.09	0.37	0.54
Number of Small Business Loans as a Proportion of Total Business Loans	0.46	0.29	0.53	0.34	1.35	0.59	0.83	2.08**	0.38	0.16
Average Loan Size of Small Business Loans	0.30	0.40	0.14	0.26	0.92	1.30	0.32	2.36**	1.20	0.37
Interest Rates Charged on Loans	0.05	0.07	-0.02	-0.19	1.23	0.70	1.92*	0.52	0.98	0.18
Loan Fees Charged to Borrowers	0.24	0.33	0.16	0.25	0.76	0.74	0.05	1.86*	0.59	0.51
Approval Rate of Loan Applications	0.14	0.11	-0.02	0.03	0.27	1.64*	0.83	1.21	0.59	0.73
Retention of Old Customers	0.19	0.07	-0.04	0.06	1.14	2.04**	1.03	1.06	0.14	0.47
1. Promotion of Small Business Loans (Marketing)	0.41	0.40	0.41	0.44	0.05	0.02	0.30	0.08	0.35	0.78
1. Time it Takes to Process a Small Business Loan Application	0.05	0.09	0.06	0.08	1.16	0.06	0.89	1.26	0.05	0.34
2. Offering of Related Services to Small Business	0.51	0.60	0.52	0.58	0.79	.06	0.55	0.80	0.15	0.60
3. Offering of New Small Business Loan Program	0.34	0.38	0.48	0.47	0.37	1.25	0.99	0.99	0.75	0.96
4. Costs of Processing Small Business Loan Applications	0.03	0.13	0.04	0.12	0.83	0.55	0.97	1.71*	1.90*	0.56

\*Significant at the 1 percent \*\*Significant at the 5 percent \*Significant at the 10 percent

Figure 1

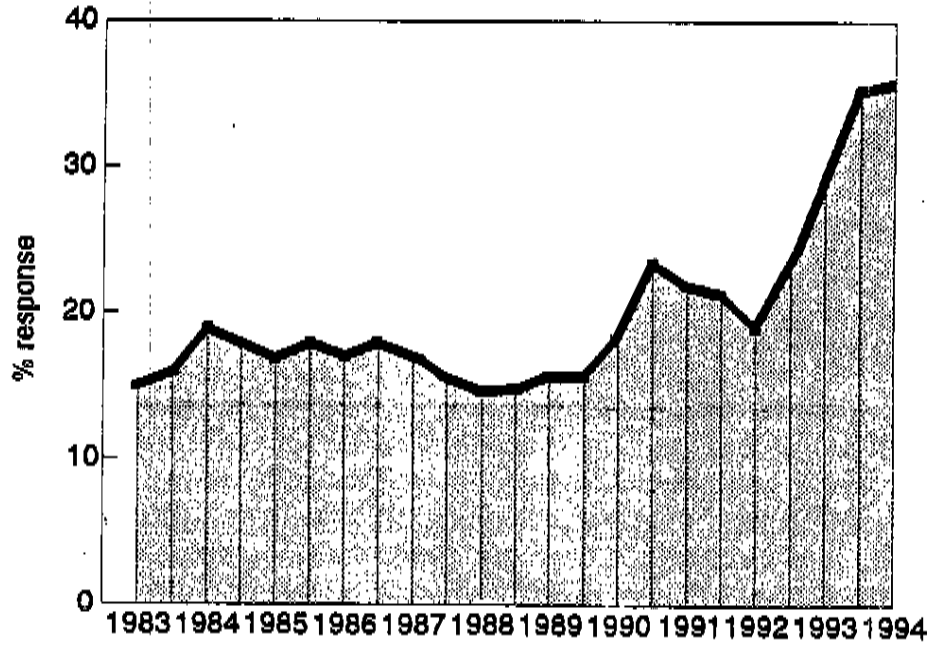
Bank Market Share, 1988 and 1994  
(CFIB survey response by institution)



Source: Canadian Federation of Independent Business, results of 1994 Banking Survey (May 1994) and 1988 Banking Survey results (January 1988).

Figure 2

Financing Availability: Problems in Small Business

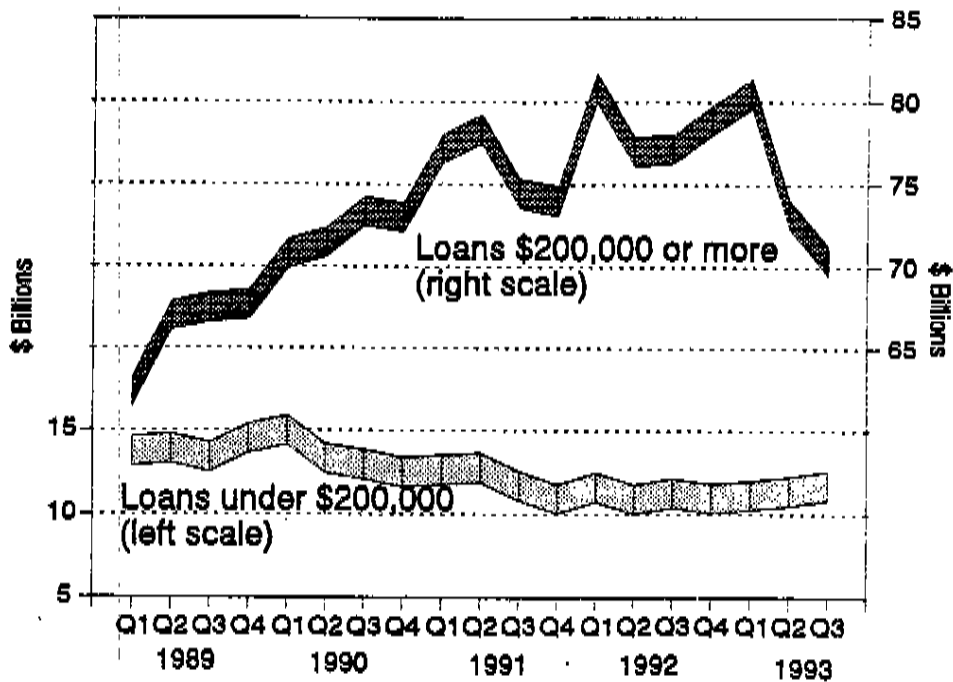


Source: Canadian Federation of Independent Business, results of Our Members' Opinions Survey, #12 through #34.



Figure 3

Chartered Bank Loans to Business



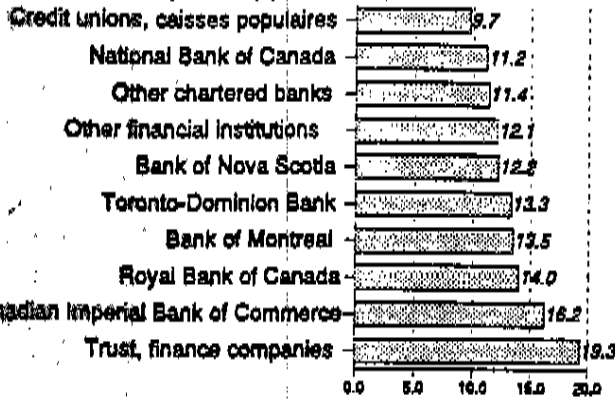
Source: Bank of Canada, *Bank of Canada Review*, Table C5.

Figure 4

Lending Performance: Rankings by Institution

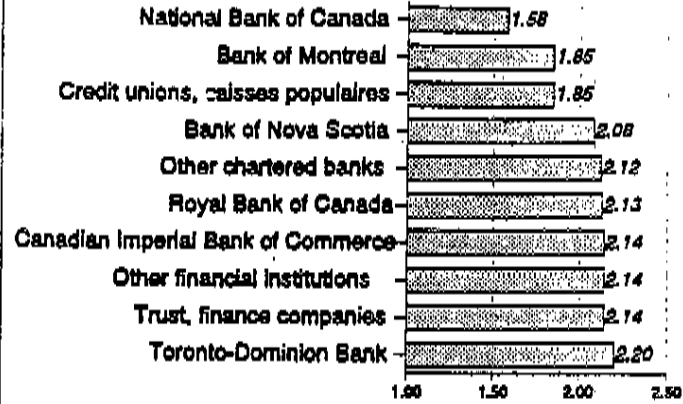
Loan Turndowns

(% of applications)



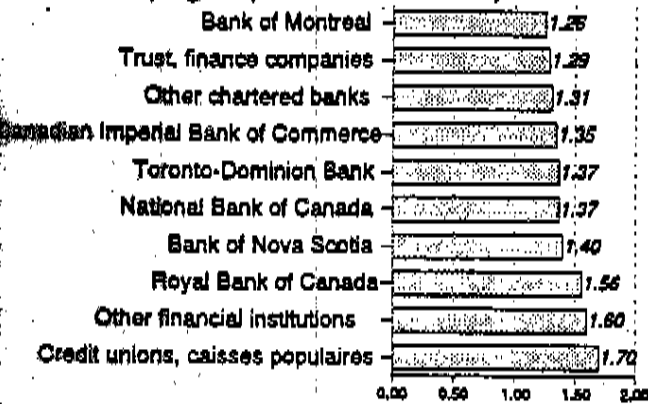
Collateral Coverage

(avg. multiple of loan amount)



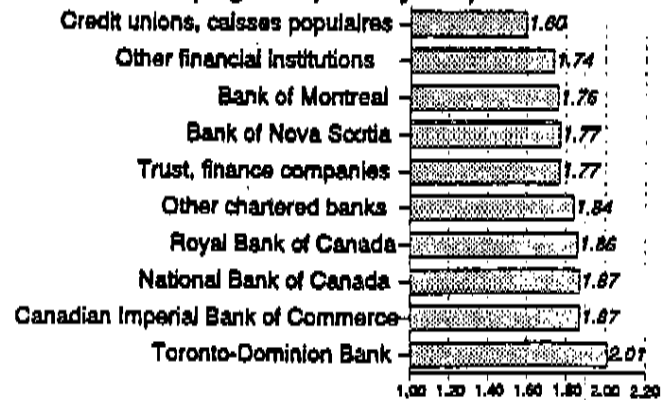
Interest Rates

(avg. % points above Prime)



Account Manager Turnover

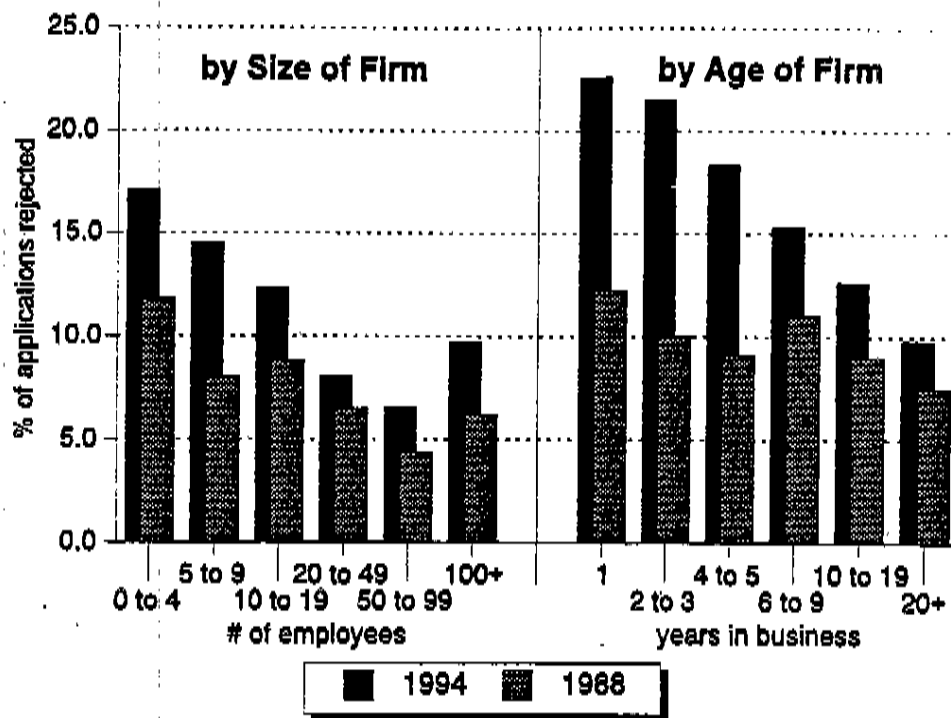
(avg. # in past 3 years)



Source: Canadian Federation of Independent Business, results of 1994 Banking Survey (May 1994).

Figure 5

Loan Rejections by Size and Age of Firm



Source: Canadian Federation of Independent Business, results of 1994 Banking Survey (May 1994).

Figure 6

Loan Rejections by Size of Loan

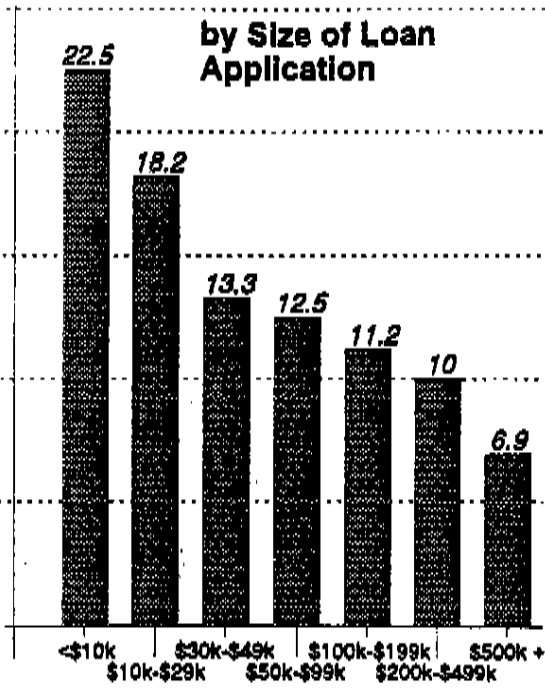
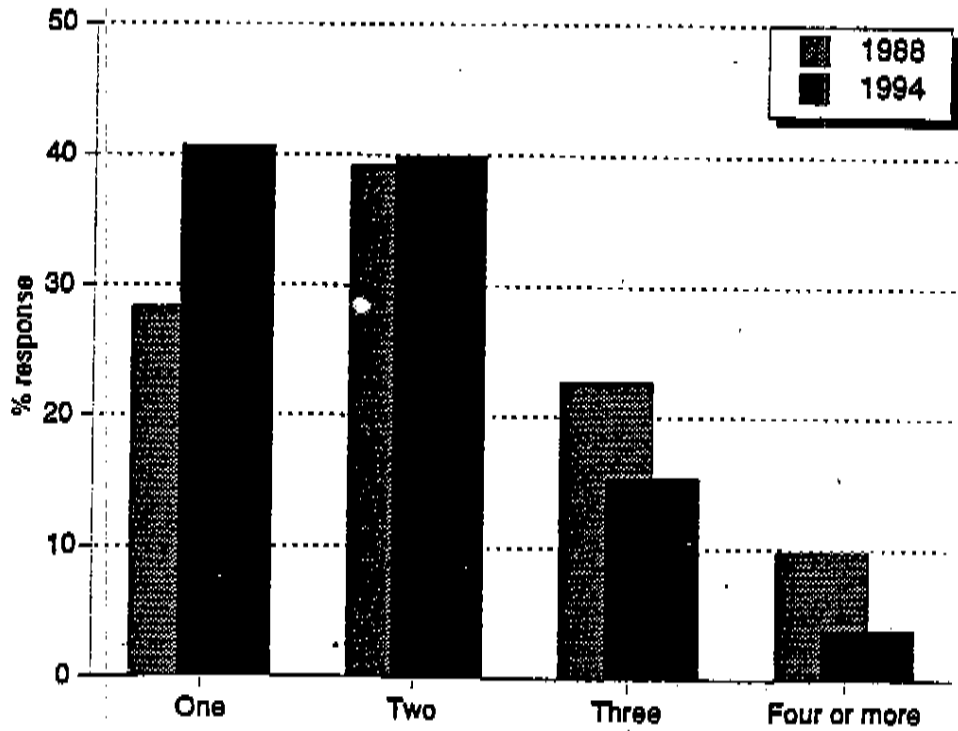


Figure 7

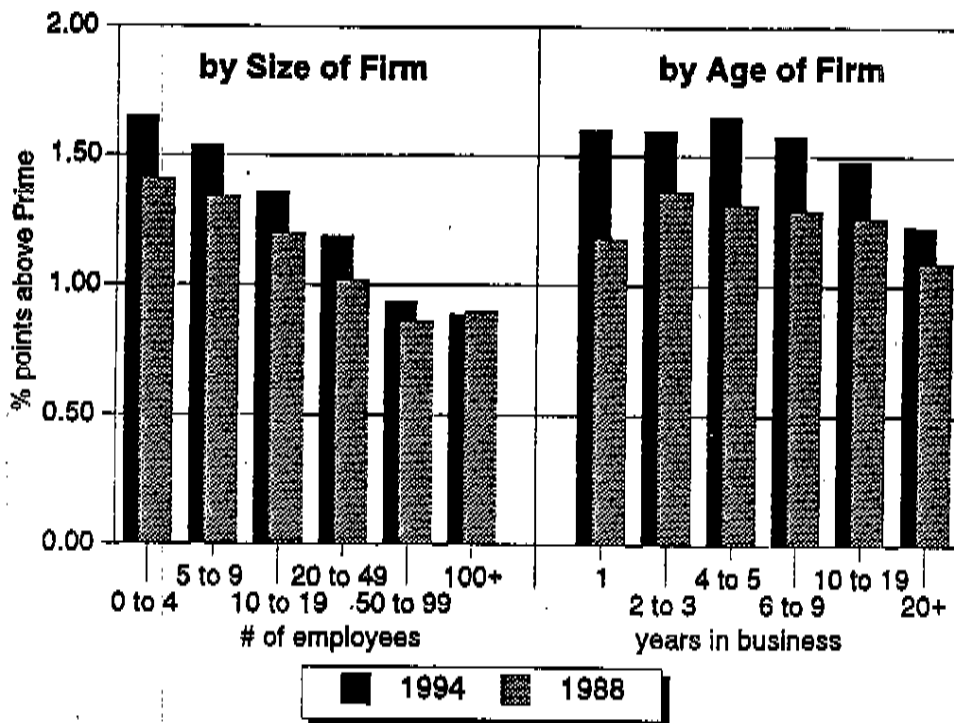
Number of Bank Account Managers Dealt with in Past Three Years, 1988 and 1994



Source: Canadian Federation of Independent Business, results of 1994 Banking Survey (May 1994)

Figure 8

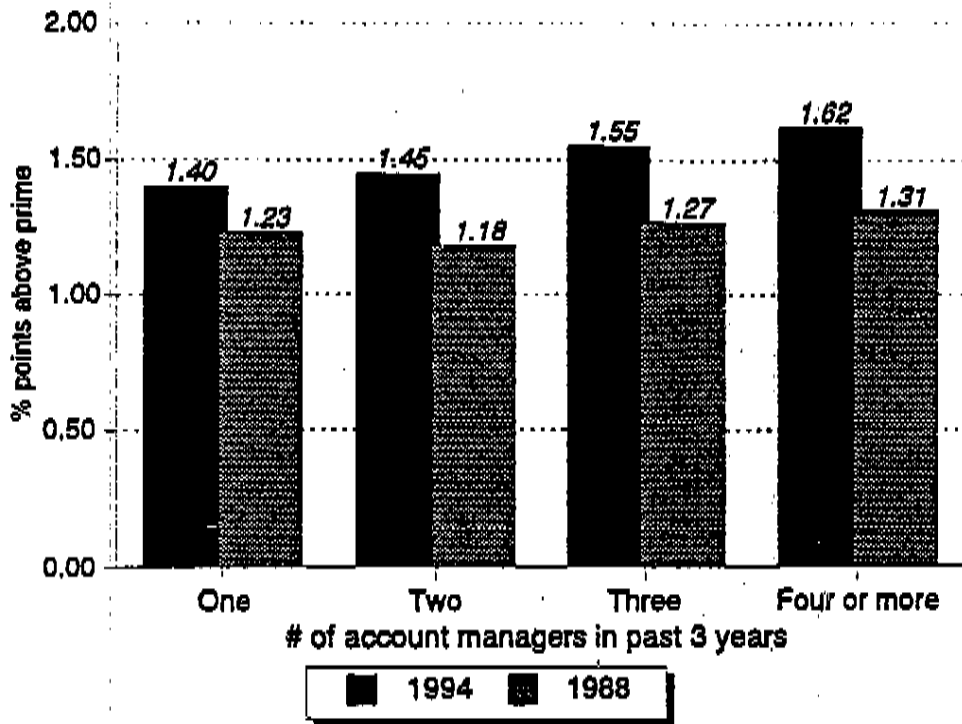
Interest Rates by Firm Size and Age, 1988 and 1994



Source: Canadian Federation of Independent Business, results of 1994 Banking Survey (May 1994)

Figure 9

Average Interest Rate Premiums by Number of Past Account Managers, 1988 and 1994



Source: Canadian Federation of Independent Business, results of 1994 Banking Survey (May 1994)