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Bank Consolidation and Small Business Lending:

It's Not Just Bank Size That Matters

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Abstract

Concern with the potential effect of bank mergers on small business lending has stemmed from a belief that larger acquirers may be less willing than their smaller targets to be active in the small business lending market. However, we find that in roughly half the commercial and savings bank mergers of the past three years, the acquirer has a larger portfolio share of small business loans than its target; moreover, the most common acquirer of small banks is another small bank. The empirical results support the hypothesis that acquirers tend to recast the target in their own image, causing small business loan portfolio shares of the consolidated bank to converge toward the pre-merger portfolio share of the acquirer. Since acquirers are almost as likely to have larger as smaller shares of small business loans in their portfolios, compared to their targets, this suggests that not all mergers will shrink small business lending; many will actually increase it.

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Over the past ten years, the banking industry has experienced significant shrinkage, with the number of commercial and savings banks declining by nearly 30 percent from the end of 1985 to the end of 1995. A major public policy concern stemming from this consolidation is the impact it could have on the availability of loans to small businesses. Small business borrowers traditionally have relied on banks to satisfy their credit needs. While large borrowers increasingly gain direct access to national credit markets by issuing commercial paper and bonds, small business borrowers continue to be bank dependent. Thus, these borrowers are particularly sensitive to changes in bank regulation or in the structure of the banking industry.

During the current period of rapid bank consolidation, a number of studies have raised concerns that such consolidation may reduce credit availability to small businesses (Berger, Kashyap, and Scalise 1995; Berger and Udell 1996; Keeton 1995, 1996; Peek and Rosengren 1995), though Strahan and Weston (1996) have found no relation between mergers and small business lending. Several factors may be involved in the perception that large banks, made large in part by acquisitions, may not be responsive to the needs of small businesses. First, during the past three years of rapid bank consolidation, large business loans have grown more rapidly than small business loans. Second,

small business lending has grown more rapidly at small banks than at large ones. Third, a bank's share of small business loans tends to be inversely related to the size of the institution, as measured by total assets. While none of these factors provides a direct link between bank mergers and reductions in small business lending, they are sufficiently suggestive to require further study.

This paper investigates how mergers influence the willingness of a banking organization to lend to small businesses. We use a survey, conducted annually in the June bank Call Reports since 1993, to examine changes in business loans of $1 million or less for nonfarm, nonresidential and commercial and industrial purposes.[1] While changes in bank lending to small businesses subsequent to a merger are related to the size of the acquirer, this study finds that the degree to which the bank was committed to small business lending prior to the merger also affects the willingness of the surviving bank to lend to small businesses.

Much of the public attention has been on acquisitions of small banks by large ones, but in fact, the most prevalent type of merger involves the consolidation of two (or more) small banks. Furthermore, in roughly half the mergers, the acquirer has a small business loan portfolio share greater than that of its target; and in approximately half the mergers, small business loans increase rather than decrease during the period immediately

after the merger. An increase is more likely to occur if the acquirer is a small bank or if the acquirer has a greater portfolio share of small business loans than its target, as the consolidated bank partially offsets the initial merger-induced decline in its small business loan portfolio share.

The next section examines recent patterns in bank consolidation. The second section describes the data and the empirical tests. The third section provides the empirical results. The final section offers conclusions.

I. Small Business Lending After Mergers

The idea that acquirers in mergers will be less inclined than their targets to lend to small businesses, or that this unique line of business might be less emphasized in the larger consolidated institution, implies that particular types of institutions tend to emphasize lending to small businesses.[2] Otherwise, bank consolidation should pose no problem for the availability of bank credit for small businesses. As long as small business lending remains profitable, the large number of banks in the United States should provide an ample pool of potential lenders. However, if most small business lending is done by smaller local lenders, and only certain lenders can profitably operate this line of business, consolidation potentially could cause a significant change in the terms or availability of small business loans by banks.

Most banks engage in different activities as they grow, either internally or through acquisitions, specializing in activities where their size provides them comparative advantages. For example, trading operations, derivatives activity, international operations, and national credit card operations require economies of scale and scope that can be effectively obtained only by large institutions. Banks unable to provide such services, such as small banks, may be at a competitive disadvantage in attracting the business of larger loan customers. On the other hand, small business loans may be local-information intensive (Berger and Udell 1995; Peterson and Rajan 1994), providing a competitive advantage to smaller institutions with closer links to the local community (Nakamura 1994). Such loans may require a better understanding of idiosyncratic local conditions and firm-specific characteristics, as well as a very different cluster of services from those required by larger borrowers. This could mean that acquisitions of such small banks, particularly by much larger institutions, would reduce bank small business lending.

One reason for concern has been that during a period with significant bank consolidation, bank loans to small businesses have grown less rapidly than loans to large businesses. Data by size of bank loan are available only since the second quarter of 1993, and then only once per year in the second quarter Call Reports. Thus, we can document the growth rate of business loans

by size only from the second quarter of 1993 to the second quarter of 1996. For this study, we have defined small business loans throughout the paper as commercial and industrial loans and nonfarm, nonresidential loans of $1 million or less. While the survey includes loan categories of $100,000 or less and $250,000 or less as well, we focus on the $1 million or less category to reduce possible reporting errors, particularly during the first wave of responses to this new survey.[3]

Over this three-year period, total bank business loans larger than $1 million in size grew by 28.0 percent, while loans of $1 million or less grew by only 12.3 percent. The weaker growth in smaller business loans could be attributed to many factors. For example, it could reflect the stage of the business cycle, insofar as the timing or magnitude of fluctuations in economic activity differs for small firms compared to larger firms. Similarly, the data could reflect a pattern of weaker economic growth in regions or in sectors of the economy dominated by small businesses during this particular period. On the other hand, this period also coincides with radical changes transforming the banking industry. In particular, because the degree to which banks participate in the market for small business loans tends to differ by bank size, the consolidation in the banking industry also may play an important role.

Another source of concern arises from the fact that while small business loans are a critical component of the operations

of small banks, they are generally less important to larger institutions. Banks with assets less than $300 million have roughly one-sixth of their domestic assets in small business loans and, at banks with assets less than $100 million, virtually all business loans are for amounts of $1 million or less.[4] At larger banks, business loans of $1 million or less account for a smaller percentage of assets and total business lending, with the shares declining sharply as asset size increases. For example, for banks with more than $3 billion in assets, business loans of $1 million or less account for only about 5 percent of assets and a little over 20 percent of total business lending.

The strong negative correlation between the size of institution and the share of business loans that are small is potentially important, if it is a reflection of willingness to engage in small business lending. The extent to which large acquirer banks retain the portfolios of small loans at their target banks will be affected by the motivation for the merger (Pilloff 1996). Are acquiring banks most interested in low-cost core deposits, an increased market share, a more balanced geographic coverage of the franchise, or expertise in particular lines of business, including the accumulated stock of private information about small loan customers at these small banks? That is, are acquirers after the asset side or the liability side of the acquired bank's balance sheet and, if the former, the wholesale or retail lines?

Small business lenders have accumulated a stock of private information about their small business customers and, presumably, small business lending could be a profitable line of business for an acquiring bank, even if it is not currently an area of emphasis. If this is so, we may have little to fear regarding reduced credit availability to small businesses. However, if the information is not easily transferred, if small business loans are uneconomical given the overhead costs of many larger institutions, or if small business loans are the focus of small lenders only because of an artificial constraint on loan concentration that is relaxed by an acquisition, over time the now unconstrained (or at least less constrained) acquirer may jettison this acquired line of business.

Table 1 shows growth rates of assets and total and small business loans, by bank asset size classes, for the three-year period for which bank small business loan data are available. Each asset size class contains only those banks in the class at the beginning of the period (June 30, 1993) and still reporting (in any size class) at the end of the three-year period. In order to calculate growth rates, the banks must be defined consistently at both the beginning and end of the sample. This has been accomplished by force-merging the data, as of June 30, 1993, of any banks that merged during the subsequent three-year sample period.

Banks with total assets of less than $100 million increased their loans of $1 million or less by 41.9 percent during this period, while the corresponding increase for banks in the largest size class was only 3.0 percent (Table 1, last column). For the intervening asset size classes, the growth rate also declines as asset size increases. This is in contrast to the growth rate of total assets, which varies across asset size classes within a relatively narrow range. A comparison of the growth rates for total assets and small business loans during this three-year period makes clear that small business loans were an increasing share of assets for the smallest banks at the same time that they were a decreasing share of assets for the largest banks. Furthermore, this same pattern does not appear in the total business loans data. For the three larger asset size classes, both total business loans and total assets grew at approximately 20 percent, substantially faster than their small business loans.

Table 2 shows the changes in small business lending and total business lending for acquirer and non-acquirer banks, disaggregated by bank asset size classes, with the observations constructed over the three one-year subperiods for which small business loan data are available (1993:II to 1994:II, 1994:II to 1995:II, and 1995:II to 1996:II). For each one-year subperiod (window), banks are classified as being an acquirer or a non-acquirer for that specific one-year subperiod. For this designation, and throughout the remainder of the paper, we have

eliminated banks in each window that experienced an ownership change that was not associated with a bank merger, since this paper is focused on the effects of mergers, not ownership changes. This focus on mergers rather than on changes in ownership, as well as the focus on individual bank level data rather than on data aggregated to the bank holding company level, is consistent with the findings of Berger, Scalise, Saunders, and Udell (1997) that bank size is more important than holding company size and that bank mergers seem to matter more than holding company acquisitions.

If a bank is designated as an acquirer, the beginning-of-period data for the growth rate calculations are constructed by force-merging the acquirer and target data to make the data consistent with the end-of-subperiod data for the consolidated bank. Note that because the table shows the sum of observations for the three one-year subperiods, an individual bank that reported during the entire three-year period would account for three observations, which would be allocated between the acquirer and non-acquirer categories depending on whether the bank made an acquisition during the particular subperiod.

Panel 1 of Table 2 shows that acquirer banks in each of the asset size classes had higher average small business loan portfolio shares, measured relative to assets, than the non-acquirers in the same asset size class. It also shows that the portfolio share of small business loans increased only for the

under $100 million asset size class and that except for that class and the $500 million to $1 billion asset class, acquirers had larger declines in small business loan portfolio shares. The change in small business loans, scaled by assets, was generally a decreasing function of bank size, and in all but one asset size class ($500 million to $1 billion), acquirers had a smaller change in small business loans (scaled by assets) than non-acquirer banks in the same size category. Panel 2 shows that the portfolio share of total business loans increased for all asset size categories for both acquirer and non-acquirer banks. This is in sharp contrast to the changes in portfolio shares for small business loans, which show increases only for acquirer and non-acquirer banks under $100 million.

The typical merger pattern that one might expect to see would be an acquirer that is larger than its target bank, with the target having a larger percentage of small business loans in its portfolio than the acquirer bank. Surprisingly, Panel 1 of Table 3a shows that less than one-half of the acquirers in the sample (417 of 872) actually fit this description. This table shows the set of mergers used in the regression sample (to be described below) disaggregated along two dimensions: the relative asset size of the acquirer compared to the average for the banks it acquires during one of the three one-year subperiods, and the acquirer's portfolio share of small business loans (measured relative to assets) compared to that for the bank (or sum of

banks) it acquires during a given one-year subperiod. For example, the first cell in Panel A contains the 417 observations in which the acquirer is larger than the average size of its merger targets and the acquirer has a smaller portfolio share of small business loans than its target(s). For this set of banks, the act of force-merging the balance sheet data for the two (or more) banks will cause the post-merger small business loan portfolio share of the consolidated bank to rise above the value of the acquirer’s pre-merger portfolio share.

As one might expect, most observations (over 90 percent, 796 of 872) are accounted for by the two cells in the first column of Panel 1 of Table 3A, in which the acquirer is larger than its target(s). Most of the "atypical" observations in the second cell of the second column, where the acquirer is smaller than its target(s) but has a larger small business loan portfolio share (47 of 76), are accounted for by affiliate mergers, where the holding company has a certain degree of latitude in determining which of the affiliates is designated the surviving bank. While the designation is not entirely arbitrary, it may be influenced by such factors as the preferred geographical location for the bank headquarters or the type of charter (when charters differ across affiliates) rather than by the size or the primary emphasis among lines of business of the affiliate, which may be more important in determining actual bank behavior.

In only slightly more than half (446 of 872) of the observations is the target's small business loan portfolio share larger than that of the acquirer. Thus, in nearly half the cases (426 of 872), the merger will, at least initially, lower rather than raise the small business loan portfolio share of the surviving bank, compared to its pre-merger share. To the extent that the acquirer bank was at, or near, its desired portfolio share of small business loans prior to the merger, the consolidated bank presumably would prefer to raise rather than lower its small business lending subsequent to the merger. Given the large share of observations with an acquirer having a larger small business loan portfolio share than its target(s), it is not clear that bank consolidation necessarily will reduce small business lending.

Much of the concern with mergers has arisen from the fear that large banks will acquire small banks but will not maintain the target banks' lending relationships with small firms that are dependent on bank credit. Panel 2 of Table 3a shows how the patterns of small business lending subsequent to mergers differ by the size of the acquirer when the target bank is small. The primary acquirers of these small institutions are other small institutions, with only 24 percent of the mergers shown in Panel 2 having an acquirer with more than $300 million in assets.

When the acquirer is a bank with less than $100 million in assets, the acquirer has a larger small business loan portfolio

share than the target in 57 percent of the mergers (148 of 261). Even larger acquirers frequently have a larger small business loan portfolio share than their smaller targets, with 60 percent (118 of 196) of the acquirers in the $100 million to $300 million asset class having larger small business loan portfolio shares than their target(s) and 40 percent (57 of 144) of the acquirers with over $300 million in assets having a larger small business loan portfolio share than their targets. This is consistent with the evidence presented in Panel 1 of Table 2 indicating that acquirer banks tend to have more of a predisposition to emphasize small business lending relative to similarly sized non-acquirer banks.

Table 3b shows the patterns of changes in small business loan portfolio shares of the consolidated banks at the end of the one-year window compared to the forced-merged bank at the beginning of the one-year subperiod. Interestingly, for three of the four cells in Panel 1, the observations are roughly evenly split between those with a subsequent positive change in the small business loan portfolio share and those with a subsequent decline. The lone exception is the upper cell in the second column, which suffers from having such a small number of observations (29) and, in any case, contains observations that might be deemed to be atypical insofar as the average size of the targets is larger than that of the acquirer, and they have a small business loan portfolio share that is larger than that of

the acquirer bank. However, when only nonaffiliate mergers are considered (shown in parentheses), most of the dissimilarity in this cell disappears.

Panel 2 shows that the relative proportion of acquirers of small banks that increase their small business loan portfolio shares subsequent to mergers declines as the size of the acquirers increases, falling to just over 50 percent for the $100 million to $300 million asset size class and to under 50 percent for the largest size class. The only cell with substantially below 50 percent of acquirers exhibiting growth in the portfolio share following the merger represents acquirers with more than $300 million in assets whose share initially rises because of the target(s) having a larger portfolio share of small business loans. This suggests that these acquirers may be attempting to offset at least part of the initial rise resulting from the merger in order to move back toward their pre-merger portfolio share. It also highlights why pairwise comparisons that do not control for other differences in bank characteristics can be misleading, since factors such as bank size may be important in determining whether the small business loan portfolio share increases. The regressions in this study examine whether this simple comparison is altered when we control for other factors that may affect the post-merger small business lending patterns.

The data shown in Tables 3a and 3b suggest that some of the concerns with mergers may not be well founded. First, in roughly

half the commercial and savings bank mergers over the past three years, the portfolio share of small business loans of the acquirer rose rather than fell during the period immediately after the merger. Second, in slightly less than half the cases, the acquirer had a larger portfolio share of small business loans than its target(s). Third, most acquisitions of small banks are carried out by small, not large, banks. Finally, only when the acquirer is large and less active in small business lending than its small target(s) is the small business loan portfolio share of the consolidated bank much more likely to decline than to rise immediately following the merger.

II. Data and Methodology

To determine if mergers affect small business lending, it is first necessary to establish a detailed structure file of bank mergers and accurately date the mergers. This study uses the Federal Reserve System bank identification numbers used in the National Information Center (NIC) bank structure transformation file and compares them to the list of banks filing Call Reports, quarter by quarter. In each quarter, the set of banks no longer filing a Call Report is identified. This set of banks is then compared to the set of banks appearing in the transformations table for that quarter. Any bank no longer reporting but not included in the transformations table is flagged and investigated to determine the reason for termination and to be sure that it

was, in fact, not acquired and merged into another institution. Second, if the acquirer is a de novo bank in the early stages of its life or a shell bank set up by a holding company for the purpose of absorbing that holding company's acquisitions, the use of beginning-of-period data for comparison purposes may be uninformative. Thus, such banks are not included if they are in the first two years of operation.[5] We also exclude banks that have no small business loans at either the beginning or end of the one-year period or report inconsistent small business loan data.

The data set is constructed based on the one-year subperiods defined by the 1993:II, 1994:II, 1995:II, and 1996:II Call Reports that provide information on small business loans held by banks. A given bank in the sample may be in one of two categories. The “clean bank” sample includes those banks that reported at both the beginning and the end of the one-year subperiod and made no acquisitions during that subperiod. The set of “acquirer banks” are those that reported both at the beginning and the end of the subperiod and were involved in at least some mergers, with none of the acquired entities being failed institutions, bridge banks, or partial acquisitions, and for which bank Call Report data were available for all acquired entities. For reasons described earlier, we do not include banks with ownership changes during the one-year window.

Because the merger data set is viewed from the perspective of the acquirer, all acquisitions by a particular bank within a subperiod are aggregated. Thus, if Bank A acquires three separate banks at different times within a one-year subperiod, the series of mergers will be recorded as a single observation and the data for all four banks will be force-merged as of the beginning of the subperiod for comparison with the end-of-subperiod data for the surviving (consolidated) bank. Similarly, if a sequence of merger acquisitions occurs within one of the one-year subperiods, the sequence is compressed into a single transaction.[6]

Methodology

The analysis is based on a specification that attempts to explain the growth in a bank's small business loan portfolio calculated over a one-year period corresponding to the subperiods between June Call Reports, controlling for bank-specific characteristics, regional banking market characteristics, and regional economic activity. By including banks that made no merger acquisitions during the subperiod as well as banks that did make merger acquisitions in the same equation, one can test for differences in the growth in small business loan portfolios across these bank categories.

The base regression is of the form:

$$\Delta\left(\frac{SBL}{Assets}\right)_i = B_0 + \beta_1 X_{1,i} + \beta_2 X_{2,i} + \beta_3 X_{3,i} + \varepsilon_i$$

where SBL refers to the volume of small business loans (those business loans of $1 million or less in value) at bank i and X_1, X_2, and X_3 are vectors of explanatory variables. In addition to the dependent variable shown, the change in bank i's ratio of small business loans to assets (portfolio share) between the beginning and the end of a one-year subperiod, one other dependent variable is considered: the change in the volume of a bank's small business loans scaled by its assets ((SBL_t - SBL_{t-1})/ $Assets_{t-1}$). For banks that made a merger acquisition during the one-year subperiod, the changes are calculated as the difference between the value of the consolidated (force-merged) beginning-of-subperiod data and the corresponding end-of-subperiod value for the consolidated bank.

The first vector of explanatory variables, X_1, contains two merger-related variables, the share rise difference squared and the share fall difference squared. The share rise difference and share fall difference variables measure the percentage point rise or fall in the acquirer bank’s small business loan portfolio share induced by the merger, obtained as the difference between the end-of-subperiod consolidated bank’s share and the beginning-of-subperiod share of the consolidated entity obtained by force-

merging the pre-merger acquirer and target data. The share rise difference applies when the effect of force-merging the target and acquirer data was to raise the small business loan portfolio share above the of the acquirer's pre-merger share (i.e., the target had a larger portfolio share of small business loans than the acquirer). Share fall difference applies when the force-merged date indicate a portfolio share value lower than that for the acquirer prior to the merger.

Mergers with targets that are very small relative to the acquiring banks or with targets that have portfolio shares of small business loans that are very similar to those of their acquirer bank will produce relatively small values for these share difference variables. Because the act of merging has little impact on the acquirer's small business loan portfolio share in such instances, the post-merger small business lending by the consolidated bank is likely to be little affected. On the other hand, acquirers are more likely to react to merger-induced changes in their small business loan portfolio share when that share jumps up or down by a meaningful amount. This occurs when the acquirer and target have large differences in their degree of specialization in small business lending and the impact of the acquisition on the acquirer's total assets is sizable.

To incorporate the hypothesized nonlinear response to the merger-induced shock to the acquirer's portfolio share of small business loans, we use a specification based on the squared share

rise and share fall differences. The larger the merger-induced impact on the acquirer's small business loan portfolio share, the greater the incentive for the acquirer to act to offset the shock by altering its post-merger small business lending behavior. It is precisely the situation when the acquirer and target have very different degrees of specialization in small business lending prior to the merger, and the target bank has sufficient size to cause the weighted average (consolidated bank's) portfolio share to change noticeably, that should give power to the test and be of interest from a policy perspective.

The second set of explanatory variables, X_2, contains measures of regional banking market characteristics and economic activity. To control for general geographical differences in bank structure, which can be quite substantial (Peek and Rosengren 1997), and for differences in the composition of firms (for example, differences in the relative proportions of small versus large banks and small versus large firms), this vector contains a set of (0,1) dummy variables for Federal Reserve Districts (not shown in the tables). To further control for differences in economic activity that might affect loan demand, this vector contains the contemporaneous and one lagged value of the employment growth rate for the state in which the bank is headquartered and two time-specific variables, one for the June 1994 to June 1995 subperiod and one for the June 1995 to June 1996 subperiod. To control for possible differences between

urban and rural locations, the vector contains a (0,1) dummy variable with a value of one if the bank's headquarters is in a metropolitan statistical area and zero otherwise. Finally, this vector contains two four-firm concentration ratios, one for bank deposits and one for small business loans (defined as $1 million or less), calculated for the state in which the bank is headquartered.

The third set of explanatory variables, X_3, contains measures of bank-specific characteristics. These include a (0,1) dummy variable that has a value of one if the bank is a member of a multibank holding company and zero otherwise, the logarithm of the bank's beginning-of-subperiod assets, three measures of bank health, and the ratio of the bank's domestic loans to its domestic assets. The three measures of bank health are the beginning-of-subperiod leverage ratio, the beginning-of-subperiod ratio of nonperforming loans (defined as the sum of loans past due 90 days or more and nonaccruing loans) to total loans, and the annualized return on assets measured over the six-month period prior to the beginning of the subperiod.

III. Empirical Results

The regression results are based on a pooled sample that combines observations from each of the one-year subperiods covered by the small business loan survey. The first set of regression results, shown in Table 4, amplifies the two-way

classification of mergers corresponding to the two rows in Table 3. The first column shows the results for the change in the small business loan portfolio share (measured relative to assets). Both the squared share rise difference and the squared share fall difference have estimated coefficients that are of the predicted sign and significant at the 1 percent level or better.

For those merger observations that result in an initial rise in the small business loan portfolio share of the acquirer (the target bank's small business loan portfolio share is larger than that of the acquirer), the squared share rise difference has a negative coefficient, indicating that the small business loan portfolio share of the consolidated bank tends to decline during the period following the merger (that is, the end-of-subperiod value for the consolidated bank's small business loan portfolio share will be lower than the force-merged value of the share measured at the beginning of the one-year subperiod). Thus, it appears that, subsequent to an acquisition, acquirers do tend to partially offset the merger-induced positive shock to their small business loan portfolio share by reducing their small business loan portfolio concentration.

For those observations in which the merger results in an initial fall in the small business loan portfolio share of the acquirer, that is, the acquirer had a larger share of small business loans than its target bank(s), the acquirers tend to increase their small business loan portfolio share subsequent to

the merger. Again, this supports the hypothesis that acquirer banks tend to partially offset a merger-induced shock to their small business loan portfolio share.

With respect to the other explanatory variables, only six have significant estimated effects. Bank size (the logarithm of beginning-of-subperiod total assets) has a negative effect that is highly significant. Not only do larger banks tend to have, on average, a smaller portfolio share of small business loans, but their share tends to grow more slowly (shrink faster). Also, a higher leverage ratio, a larger share of nonperforming loans, a higher return on assets, and a higher loans-to-assets ratio each slow the growth in the small business loan portfolio share. The time dummy variable for the June 1994 to June 1995 subperiod has a positive and significant estimated effect, indicating greater growth, on average, in the second one-year subperiod of the three-year sample compared to the first.

Column 2 shows the results with the change in the volume of small business loans, scaled by total assets, as the dependent variable. The signs on the estimated coefficients of the merger-related variables are again as predicted, but only one of the two coefficients is significant at the 1 percent level, while the other is significant at the 5 percent level. Thus, these results also suggest that, subsequent to a merger, acquirers tend to offset the merger-induced shock to their small business loan portfolio shares. As in the case of the regression shown in the

first column, the estimated coefficient on the logarithm of assets is negative and highly significant, indicating less growth in small business loans at larger institutions. Among the other explanatory variables, again the leverage ratio, the nonperforming loans ratio, the loans-to-assets ratio, and the second subperiod dummy variable are each significant, although the sign on the loans-to-assets ratio is now positive. In addition, coefficients on contemporaneous employment growth, lagged employment growth, and the dummy variables for being in an urban location and being in the third subperiod are positive and significant. On the other hand, the return on assets no longer has a significant effect.

Table 5 splits the bank sample between acquirer banks with less than 10 percent and those with more than 10 percent of their assets in small business loans. When the small business loan portfolio share of the target bank(s) exceeds that of the acquirer, the coefficient on squared share rise difference is always negative and is significant in three of the four equations. This implies that acquirers tend to reduce their small business lending to make the portfolio share of the consolidated bank more closely resemble the pre-merger share of the acquirer. However, the coefficients are larger and more significant for the set of acquirer banks that are less specialized in small business loans.

When the small business loan portfolio share of the acquirer exceeds that of its target bank(s), the estimated coefficients on the squared share fall difference are positive in three of the four instances and are significant at the 1 percent confidence level only for the set of banks with a small business loan specialization greater than 10 percent. This implies that the more specialized banks are raising the small business loan portfolio share of the consolidated bank to resemble more closely the larger pre-merger share of the acquirer bank. The lack of significance for the squared share fall difference variable for the less specialized sample (< 10 percent of assets) may partly reflect the relatively small number of banks that acquired targets with lower portfolio shares of small business loans, 76 compared to 191 acquirers with a positive value for share difference (share rise difference).

Among the control variables, several interesting patterns emerge. If the bank is part of a multibank holding company, banks in the set of less specialized acquirers tended to raise their small business lending concentration, while more specialized lenders were more likely to reduce their small business lending. Furthermore, the negative impact of the nonperforming loans ratio is much greater for the set of banks with a small business loan specialization greater than 10 percent, the latter being consistent with the acquirer using the merger to diversify away from one of its current areas of

specialization. Bank size has a negative and highly significant effect for both specialized and non-specialized borrowers, although the estimated effects are much larger if the acquirer is specialized. Similarly, the return on assets has a much larger effect and the leverage ratio has a much smaller effect on the less specialized set of banks.

The equations shown in Table 6 split the bank sample along another dimension, bank size, between those with assets less than $100 million and those with assets greater than $100 million. For the set of small banks, acquirers exhibited a strong tendency to revert to their pre-merger small business loan portfolio shares. When the acquirer's small business loan portfolio share was smaller than that of its target(s), the squared share rise difference variable had a negative coefficient that was significant at the 1 percent level for changes in the small business loan portfolio share (column 1) and negative, but not significant, for changes in the volume of small business loans scaled by assets (column 2). When the acquirer had a larger small business loan portfolio share than its target(s), both coefficients for the squared share fall difference variable were positive and highly significant, indicating that the acquirer raised the amount of its small business lending concentration.

For the banks with more than $100 million in assets, which on average increased small business lending much less than banks with assets under $100 million, the reversion in the small

business loan portfolio share towards the acquirer's pre-merger share occurs only if the acquirer has a smaller portfolio share than its target(s). Thus, these large banks tended to shrink their concentration on small business lending subsequent to a merger. On the other hand, the coefficient estimates indicate no tendency for these large banks to raise their small business lending in response to a merger-induced decline in their small business loan portfolio share.

We should not expect to observe a strong tendency for acquirer banks to offset merger-induced shocks to their small business loan portfolio shares across the board. For example, if the degree of specialization of the target is very similar to that of the acquirer or if the target bank is very small relative to the size of the acquirer, the merger-induced shock to the acquirer's small business loan portfolio share will be quite small. In that case, the consolidated bank will have little to offset and it is likely that any subsequent change in its small business loan portfolio share will be quite small and may be dominated by other factors (noise) rather than by a meaningful shock to which an acquirer might react. Thus, it might be more informative to isolate the subsample of mergers in which one might expect to observe a systematic response by an acquirer to a merger-induced shock to its small business loan portfolio share. Table 7 shows the results of reestimating the regression with a merger sample including only those mergers where the pre-merger

difference in the small business loan portfolio shares between the acquirers and their targets exceeds 20 percentage points in absolute value. We still include the full set of banks in the nonmerger ("clean") sample.

The results of the first equation (column 1) show that both the squared share rise difference and the squared share fall difference are highly significant and of the predicted sign. This should not be surprising insofar as the results are from precisely those mergers that should give the power to the test, mergers where acquirers and targets have very different degrees of specialization in small business lending. To make sure that this result does not arise from just a few observations, we reestimated the equation omitting observations where the merger-induced change in the small business loan portfolio share (share rise difference and share fall difference) exceeded 10 percent in absolute value (column 2). That is, we omitted those observations where the size of the target relative to that of its acquirer was large enough for the large pre-merger differences in portfolio shares to cause their weighted average to differ by more than 10 percentage points from the acquirer's pre-merger small business loan portfolio share. This removed the 15 percent of the merger observations included in column 1 that had the largest values for share rise difference and share fall difference, which will substantially reduce the power of the test.

As expected, the t-statistics fall on the squared share rise difference and squared share fall difference variables, although their estimated coefficients retain their signs and are of similar magnitude. Now the share rise difference variable is significant at the 5 percent level, and the share fall difference is significant only at the 10 percent level. Thus, the evidence that acquirers tend to offset the merger-induced shock to their small business loan portfolio share is coming from those observations with large portfolio share differences between acquirers and their targets in general, and it is not just a result of including the most extreme observations. As a further check on robustness, we omitted all affiliate merger observations as well, since one might hypothesize that the changes in the small business loan portfolio shares for such observations might be dominated by other considerations in many instances. However, the results shown in the third column for the set of non-affiliate mergers are quite similar to those in column 2.

A variety of other specification tests were conducted to verify that this tendency for acquirers to partially offset the merger-induced shocks was strongly in the data. The results are qualitatively similar when we omit the first one-year subperiod that uses the less reliable June 1993 survey, and when we use alternative thresholds for bank size and degree of specialization. We also tested for a different effect for affiliate merger observations compared to non-affiliate

observations, and found no significant difference. The finding of similar results for affiliate and nonaffiliate mergers is consistent with Berger, Scalise, Saunders, and Udell (1997), who found that “family mergers” have similar effects to other mergers. The results for the squared share rise difference, squared share fall difference, and bank size are quite consistent across empirical specifications.

Thus, the empirical results support the hypothesis that acquirers tend to partially recast the target in their own image, causing small business loan portfolio shares of the consolidated bank to converge toward the pre-merger portfolio share of the acquirer. Since acquirers are almost as likely to have larger as smaller small business loan portfolio shares, compared to their targets, this suggests that not all mergers will shrink small business lending; many will actually raise it. However, it does appear that the tendency for banks to shrink their small business lending to offset a merger-induced rise is somewhat more robust across the many alternative sample splits than is the case for those acquirers that absorb merger-induced declines in their small business loan portfolio shares. On the other hand, the significant negative effect of bank size is particularly robust across all alternative specifications, indicating that larger banks tend to shrink (grow more slowly) their small business loan concentrations, in addition to having, on average, a smaller degree of specialization compared to smaller banks.

IV. Conclusion

Concern with the potential effect of bank mergers on small business lending has stemmed from a belief that large acquirers may be less receptive than their target banks to being active in the small business lending market. We do find that acquirers tend to partially offset a merger-induced change in their small business loan portfolio share subsequent to a merger. However, mergers frequently raise the small business lending of the consolidated bank, because many mergers do not fit the stereotypical view of a large bank with few small business loans acquiring a much smaller target with a large portfolio share of small business loans. We find that acquirer banks tend to have a greater degree of specialization in small business lending than non-acquirers of the same size. We also find that large acquirer banks increased small business lending somewhat more than non-acquirer banks. Furthermore, acquirers in roughly half the mergers had a larger small business loan portfolio share than their target banks and increased their small business loans after the merger in roughly half the cases.

After controlling for other relevant factors, the regression results support the hypothesis that acquirer banks tend to alter their small business lending in order to partially offset the merger-induced shock to their portfolio share of small business loans. When banks are relatively specialized in small business lending or when the acquirer is small, this is especially true.

Thus, while larger banks have increased their small business lending less rapidly than small banks over the past three years and in general large acquirers are less active small business lenders than small acquirers, nonetheless many large acquirers have specialized in small business lending and have increased their portfolio share of small business loans after mergers. The fact that a merger occurs, or that an acquirer is much larger than its target, is not sufficient to determine the proclivity of the consolidated bank to engage in small business lending after the merger. The degree to which the acquirer bank has already committed to small business lending is an important determinant of its likelihood to continue to do so after the merger.

However, one must be cautious about projecting these results to the future. The empirical work is based on only three years of data, so only short-term implications can be explored until additional observations have been accumulated. Furthermore, the significant changes in the legal and industrial structure of the banking industry, particularly with the removal of restrictions on interstate branching and the likely reduction in Glass-Steagall Act restrictions, might alter the nature of bank mergers in the future.

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Endnotes

1. The small business loan data in the Call Reports are categorized by size of loan, rather than the size of the business borrower. However, for small loan sizes, it is likely that using the size of the loan to define small business lending is satisfactory.

2. Here, we analyze only total bank small business lending, although the bank Call Reports do split business loans into commercial and industrial loans and nonfarm, nonresidential loans. The latter category is distinguished by the use of real estate as collateral for the business loan.

3. Because this is a new survey, bank responses may have suffered from being on the early portion of a learning curve. In fact, Berger and Udell (1996) find inconsistencies between the small business loan survey data in the Call Reports and the Survey of Terms of Bank Lending data. In particular, they find that banks answering the question as to whether all or substantially all of their nonfarm, nonresidential real estate loans and commercial and industrial loans had original amounts of $100,000 or less may have answered in terms of number of loans rather than volume of loans, as intended. However, this explanation accounts for only a portion of the general under-reporting of original amounts found by Berger and Udell (1996). Furthermore, the underreporting is much more important for the smaller loan sizes.

The small loan data have also been scrutinized, identifying what appear to be egregious errors. In particular, the small loan data have been checked by calculating the average size of small business loans in each size category for each bank to ensure that it did not exceed the maximum size of the loan category, and by comparing the total reported small business loans to the total loans reported for both C&I loans and nonfarm, nonresidential real estate loans for each bank.

Because of potential problems using the first year of the survey, we recalculated Tables 1 and 2 and reestimated our regressions excluding the data based on first year of the survey. The results indicated similar qualitative results whether or not the first year is included. Because eliminating the first year reduces the sample by a third, and because the results are qualitatively similar, we report the results using the entire sample.

4. Federal and state laws, as well as internal bank guidelines, limit lending to individual borrowers. For example, for national

banks, the lending limit for loans that are not fully secured is 15 percent of the bank's unimpaired capital and surplus. These loan concentration limits are likely to be binding on most small banks.

5. The identification of de novo banks is complicated by the fact that de novo entry does not account for all of the instances in which a bank enters the set of commercial and savings banks. Charter changes and new entities formed from the acquisition and merger of all or part of existing institutions also account for a large number of new commercial and savings banks.

6. For example, if Bank A is acquired and merged into Bank B in 1993:III, which is in turn acquired and merged into Bank C in 1994:I, the 1994:II portfolio data for the surviving (consolidated) Bank C must be compared to the sum of the 1993:II data for Bank A, Bank B, and Bank C.

Table 1
Asset and Loan Growth Rates by Bank Asset Size Classes, June 30, 1993 to June 30, 1996[a]

		Percentage Change		
Asset Size Class[b]	Number of Banks	Total Assets	Total Business Loans	Business Loans ≤ $1million
< $100 million	6,841	24.4	46.9	41.9
$100-300 million	1,871	22.0	33.4	21.0
$300-500 million	581	19.6	22.5	6.1
$500 million-$3 billion	237	20.0	21.9	4.6
>$3 billion	109	23.4	19.3	3.0
Total	9,639	22.5	23.1	12.8

[a] The set of banks in this table includes all commercial and savings banks that filed Call Reports on both June 30, 1993, and June 30, 1996. The percentage change values are for the sum of assets or loans for all banks in a particular asset category.

[b] Bank asset size is based on the beginning-of-period value reported on the June 30, 1993 Call Report.

Table 2
Differences in Business Lending Between Acquirer and Non-Acquirer Banks, by Asset Classes[a]

Panel 1

Asset Size Class	Number of Observations		Percent[b]					
			$\frac{\text{Small Business Loans}}{\text{Assets}}$		$\triangle\left(\frac{\text{Small Business Loans}}{\text{Assets}}\right)$		$\triangle \frac{\text{Small Business Loans}}{\text{Assets}}$	
	Acquirer	Non-acquirer	Acquirer	Non-acquirer	Acquirer	Non-acquirer	Acquirer	Non-acquirer
< $100 million	278	20,260	18.87	16.12	1.16	0.73	1.79	1.88
$100-300 million	231	5,809	19.07	17.13	-0.22	-0.01	0.45	1.07
$300-500 million	85	1,028	15.38	14.60	-1.26	-0.29	-0.81	0.59
$500 million-1 billion	88	594	15.52	12.45	-0.31	-0.38	0.51	0.39
$>1 billion	190	735	6.54	5.51	-0.22	-0.01	-0.04	0.11
Total	872	28,426	7.55	9.46	-0.21	0.04	0.00	0.52

Panel 2

Asset Size Class	Number of Observations		Percent[b]					
			$\frac{\text{Total Business Loans}}{\text{Assets}}$		$\triangle\left(\frac{\text{Total Business Loans}}{\text{Assets}}\right)$		$\triangle \frac{\text{Total Business Loans}}{\text{Assets}}$	
	Acquirer	Non-acquirer	Acquirer	Non-acquirer	Acquirer	Non-acquirer	Acquirer	Non-acquirer
< $100 million	278	20,260	20.09	16.79	1.92	0.90	2.63	2.11
$100-300 million	231	5,809	22.26	20.18	1.23	0.62	2.07	1.94
$300-500 million	85	1,028	22.03	20.50	0.28	0.48	0.96	1.78
$500 million-1 billion	88	594	24.48	21.38	1.30	0.05	2.63	1.40
$>1 billion	190	735	25.03	21.67	0.36	0.45	0.99	1.34
Total	872	28,426	24.81	20.75	0.45	0.49	1.12	1.55

[a] Each observation covers a one-year period between two consecutive June Call Reports between June 30, 1993 and June 30, 1996. The sample includes all commercial and savings banks that filed a Call Report at both the beginning and the end of the one-year subperiod and did not have a change of ownership during that one-year subperiod. Banks are assigned to asset size classes based on their asset size at the beginning of the one-year subperiod.

[b] The percentage change values are for the sum of loans and assets for all banks in a particular asset category.

Table 3a
Number of Mergers by Relative Size and Relative Small Business Loan Portfolio Shares of Acquirers and Targets

Panel 1

	Asset Size[a]		
Small Business Loans Assets	Acquirer>target(s)	Acquirer<target(s)	Total Observations
Acquirer<target(s)[b]	417	29	446
Acquirer>target(s)[b]	379	47	426
Total Observations	796	76	872

Panel 2

	Target Asset Size < $100 million[a]		
Small Business Loans Assets	Acquirer < $100 million	Acquirer: $100 million - $300 million	Acquirer>$300 million
Acquirer < target(s)[b]	113	78	87
Acquirer > target(s)[b]	148	118	57
Total Observations	261	196	144

[a] If an acquirer merges with more than one target bank during a subperiod, target bank size is measured as the average asset size of the targets acquired during the subperiod.

[b] If an acquirer merges with more than one target bank during a subperiod, the target bank small business loan portfolio share is calculated as the ratio of the sum of small business loans held by the targets to the sum of target bank assets.

Table 3b
Subsequent Changes in Small Business Loan Shares by Relative Size and Relative Shares of Acquirers and Targets[a] (Measured from beginning to end of one-year subperiods)

Panel 1

	Asset Size[b]			
Small Business Loans Assets	Acquirer>target(s)		Acquirer<target(s)	Total Observations
Acquirer<target(s)[c]				
	Number positive	202 (118)	11 (7)	213 (125)
	Number negative	215 (136)	18 (9)	233 (145)
Acquirer>target(s)[c]				
	Number positive	198 (112)	23 (6)	221 (118)
	Number negative	181 (92)	24 (6)	205 (98)

Panel 2

	Target Asset Size < $100 million[b]			
Small Business Loans Assets	Acquirer < $100 million		Acquirer: $100 million - $300 million	Acquirer>$300 million
Acquirer < target(s)[c]				
	Number positive	73 (46)	40 (26)	32 (26)
	Number negative	40 (26)	38 (27)	55 (40)
Acquirer > target(s)[c]				
	Number positive	92 (49)	60 (34)	26 (16)
	Number negative	56 (31)	58 (31)	31 (17)

[a] The numbers in parentheses reflect the set of nonaffiliate mergers.

[b] If an acquirer merges with more than one target bank during a subperiod, target bank size is measured as the average asset size of the targets acquired during the subperiod.

[c] If an acquirer merges with more than one target bank during a subperiod, the target bank small business loan portfolio share is calculated as the ratio of the sum of small business loans held by the targets to the sum of target bank assets.

Table 4
Determinants of the Change in Small Business Loans (≤ $1million)
1993:II to 1994:II, 1994:II to 1995:II, and 1995:II to 1996:II

	$\Delta\left(\frac{SBL}{Assets}\right)$	$\frac{\Delta SBL}{Assets}$
Constant	4.143**	4.669**
	(12.83)	(11.54)
(Share rise difference)^2	-.032**	-.023*
	(4.26)	(2.49)
(Share fall difference)^2	.040**	.031**
	(9.48)	(5.82)
Employment growth	-.054	.122**
	(1.51)	(2.73)
Lagged employment growth	.053	.150**
	(1.54)	(3.51)
Urban location	.003	.942**
	(0.06)	(16.07)
Concentration ratio-deposits	-.001	.007
	(0.15)	(1.49)
Concentration ratio-small loans	.003	.008
	(0.96)	(1.65)
MBHC	.007	-.111
	(0.14)	(1.77)
Log (assets)	-.186**	-.516**
	(9.09)	(20.10)
Leverage ratio	-.038**	-.025**
	(5.11)	(2.68)
Nonperforming loans/loans	-.114**	-.311**
	(9.33)	(20.36)
Return on assets	-.056*	-.024
	(2.19)	(0.73)
Loans/assets	-.025**	.018**
	(16.03)	(8.99)
Dummy 94-95	.277**	.456**
	(4.01)	(5.27)
Dummy 95-96	.030	.309**
	(0.43)	(3.54)
Number of Observations	29,298	29,298
R^2	.024	.050
SSR	356,040	558,703
SER	3.488	4.369

Notes: Each equation also includes a set of Federal Reserve District dummy variables.
Absolute values of t-statistics are in parentheses.

* Significant at the 5 percent level.
**Significant at the 1 percent level.

Table 5
Determinants of the Change in Small Business Loans by Small Business Loan Portfolio Shares ($\leq$ $1million)
1993:II to 1994:II, 1994:II to 1995:II, and 1995:II to 1996:II

	$\frac{SBL}{Assets} < 10\%$		$\frac{SBL}{Assets} > 10\%$	
	$\Delta\left(\frac{SBL}{Assets}\right)$	$\frac{\Delta SBL}{Assets}$	$\Delta\left(\frac{SBL}{Assets}\right)$	$\frac{\Delta SBL}{Assets}$
Constant	2.718**	3.170**	6.677**	7.640**
	(8.15)	(7.45)	(13.01)	(11.96)
(Share rise difference)^2	-.035**	-.033**	-.029*	-.007
	(5.41)	(3.93)	(2.15)	(0.44)
(Share fall difference)^2	.029	-.120	.043**	.032**
	(0.21)	(0.68)	(9.02)	(5.43)
Employment growth	.003	.027	-.079	.151*
	(0.06)	(0.50)	(1.60)	(2.45)
Lagged employment growth	-.047	.000	.066	.176**
	(1.16)	(0.00)	(1.37)	(2.96)
Urban location	.209**	.370**	-.029	1.151**
	(3.57)	(4.97)	(0.46)	(14.47)
Concentration ratio-deposits	-.004	.002	.003	.007
	(0.77)	(0.38)	(0.50)	(1.07)
Concentration ratio-small loans	-.005	-.011*	.005	.016*
	(1.25)	(1.97)	(0.93)	(2.49)
MBHC	.248**	.357**	-.087	-.274**
	(4.08)	(4.62)	(1.27)	(3.21)
Log (assets)	-.140**	-.227**	-.318**	-.788**
	(6.70)	(8.48)	(9.82)	(19.57)
Leverage ratio	-.018*	-.003	-.066**	-.023
	(2.55)	(0.35)	(5.19)	(1.43)
Nonperforming loans/loans	-.025	-.040*	-.160**	-.464**
	(1.86)	(2.35)	(9.04)	(21.12)
Return on assets	-.108**	-.163**	-.023	.041
	(4.31)	(5.13)	(0.57)	(0.80)
Loans/assets	-.001	.008**	-.042**	.016**
	(0.60)	(3.82)	(15.72)	(4.79)
Dummy 94-95	.377**	.315**	.269**	.577**
	(4.71)	(3.08)	(2.79)	(4.79)
Dummy 95-96	.076	.201	.074	.385**
	(0.93)	(1.92)	(0.76)	(3.19)
Number of Observations	10,449	10,449	18,848	18,848
R^2	.023	.023	.031	.069
SSR	57,751	93,861	293,334	454,448
SER	2.354	3.001	3.948	4.914

Notes: Each equation also includes a set of Federal Reserve District dummy variables. Absolute values of t-statistics are in parentheses.

* Significant at the 5 percent level.
**Significant at the 1 percent level.

Table 6
Determinants of the Change in Small Business Loans by Asset Size Class (≤ $1million)
1993:II to 1994:II, 1994:II to 1995:II, and 1995:II to 1996:II

	Assets < $100 million		Assets > $100 million	
	$\Delta\left(\frac{SBL}{Assets}\right)$	$\frac{\Delta SBL}{Assets}$	$\Delta\left(\frac{SBL}{Assets}\right)$	$\frac{\Delta SBL}{Assets}$
Constant	2.842**	.201	2.161**	4.216**
	(5.37)	(0.29)	(3.41)	(6.09)
(Share rise difference)^2	-.031**	-.018	-.036**	-.037**
	(2.90)	(1.30)	(3.39)	(3.16)
(Share fall difference)^2	.044**	.032**	-.007	-.012
	(9.95)	(5.48)	(0.50)	(0.86)
Employment growth	-.053	.137*	-.077	.036
	(1.22)	(2.43)	(1.20)	(0.51)
Lagged employment growth	.053	.187**	.046	.067
	(1.29)	(3.47)	(0.75)	(0.99)
Urban location	.107	1.204**	-.212*	.285**
	(1.94)	(16.62)	(2.36)	(2.90)
Concentration ratio-deposits	.001	.003	-.001	.009
	(0.23)	(0.40)	(0.15)	(1.22)
Concentration ratio-small loans	.002	.014*	.004	.002
	(0.46)	(2.29)	(0.64)	(0.27)
MBHC	.039	.080	-.059	-.411**
	(0.65)	(1.01)	(0.65)	(4.14)
Log (assets)	-.042	-.119*	-.047	-.369**
	(1.06)	(2.29)	(1.12)	(8.05)
Leverage ratio	-.042**	-.006	-.018	-.055**
	(5.02)	(0.59)	(1.08)	(2.99)
Nonperforming loans/loans	-.099**	-.303**	-.147**	-.299**
	(7.01)	(16.38)	(6.06)	(11.27)
Return on assets	-.079**	-.159**	-.009	.323**
	(2.68)	(4.10)	(0.18)	(5.68)
Loans/assets	-.025**	.023**	-.025**	.004
	(13.45)	(9.64)	(8.48)	(1.25)
Dummy 94-95	.133	.248*	.622**	.932**
	(1.61)	(2.29)	(4.91)	(6.75)
Dummy 95-96	-.061	.150	.239	.647**
	(0.73)	(1.37)	(1.87)	(4.65)
Number of Observations	20,538	20,538	8,760	8,760
R^2	.019	.049	.025	.057
SSR	245,178	422,499	109,436	130,477
SER	3.457	4.539	3.540	3.865

Notes: Each equation also includes a set of Federal Reserve District dummy variables. Absolute values of t-statistics are in parentheses.

* Significant at the 5 percent level.
**Significant at the 1 percent level.

Table 7
Determinants of the Change in the Small Business Loan (≤ $1million) Portfolio Share
Merger Sample with Portfolio Share Differences between Acquirer and Target > 20 Percentage Points in Absolute Value
1993:II to 1994:II, 1994:II to 1995:II, and 1995:II to 1996:II

		Omitting Large Values[a]	Omitting Large Values and Affiliate Merger Observations[a]
Constant	4.051** (12.14)	4.049** (12.14)	4.053** (12.14)
(Share rise difference)^2	-.043** (4.95)	-.055* (2.33)	-.053* (2.21)
(Share fall difference)^2	.050** (10.46)	.038 (1.86)	.036 (1.71)
Employment growth	-.056 (1.53)	-.054 (1.48)	-.052 (1.42)
Lagged employment growth	.058 (1.67)	.058 (1.66)	.057 (1.64)
Urban location	.016 (0.33)	.018 (0.38)	.017 (0.37)
Concentration ratio-deposits	-.001 (0.30)	-.001 (0.36)	-.002 (0.39)
Concentration ratio-small loans	.003 (0.93)	.004 (0.99)	.004 (1.00)
MBHC	.016 (0.32)	.015 (0.29)	.014 (0.27)
Log (assets)	-.179** (8.28)	-.179** (8.29)	-.179** (8.29)
Leverage ratio	-.038** (5.01)	-.038** (5.04)	-.038** (5.03)
Nonperforming loans/loans	-.114** (9.27)	-.114** (9.28)	-.114** (9.28)
Return on assets	-.055* (2.10)	-.053* (2.04)	-.053* (2.05)
Loans/assets	-.025** (15.73)	-.025** (15.73)	-.025** (15.73)
Dummy 94-95	.271** (3.86)	.276** (3.93)	.277** (3.94)
Dummy 95-96	.036 (0.51)	.038 (0.53)	.038 (0.53)
Number of Observations	28,486	28,477	28,467
R^2	.024	.020	.020
SSR	347,951	347,380	347,300
SER	3.497	3.494	3.495

[a] The regressions in Columns 2 and 3 omit those merger observations that have a value for share rise difference or share fall difference greater than 10 percentage points in absolute value.

Each equation also includes a set of Federal Reserve District dummy variables.
Absolute values of t-statistics are in parentheses.
* Significant at the 5 percent level.
**Significant at the 1 percent level.