# BIGGER, FASTER... BUT BETTER? HOW CHANGES IN THE FINANCIAL SERVICES INDUSTRY AFFECT SMALL BUSINESS LENDING IN URBAN AREAS

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#### **A**BSTRACT

The financial services industry continues to undergo substantial changes in structure and practice. Bank mergers, the convergence of bank and non-bank activity, the use of credit scoring, and the increasing geographic scale of small business lending markets are all likely to have significant impacts on credit delivery to small businesses. This paper assesses the extent to which the evolving structure of the small business finance system affects both the nature and availability of capital in inner cities and modest income suburbs. The author discusses the implications recent trends have for both financial services regulation and community economic development policy, and offers recommendations for future policies, programs and initiatives in these areas.

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## BIGGER, FASTER... BUT BETTER? HOW CHANGES IN THE FINANCIAL SERVICES INDUSTRY AFFECT SMALL BUSINESS LENDING IN URBAN AREAS

#### **EXECUTIVE SUMMARY**

This report identifies some of the major changes in small business lending in the last two to three decades with a particular focus on impacts on central cities and modest-income suburbs. Some of the impacts are complex. Certain firms in these communities – especially those with strong, well-established credit – may actually see improvements in access to loans while many others – especially those who need customized loans and those with marginal credit – are likely to see increasing problems. Overall, the net effect of changes in small business lending is likely to be a continuing disparity in access to credit between older, modest-income and newer, higher-income areas. The paper raises a number of policy implications and points to some useful areas for additional research.

#### **Small Business Lending Across Metropolitan Space**

Low- and moderate-income tracts in both cities and suburbs fare relatively poorly in the market for small business loans. Based on Community Reinvestment Act (CRA) data, the small business loan per firm rate in the U.S. in 1997 was 45 percent higher in upper-income suburban census tracts than in lower-income suburban tracts, and 42 percent higher in upper-income central-city tracts than low-income central-city tracts (Canner, 1999). When considering only the mostly residential central city neighborhoods that do not have very high levels of commercial activity (which describes most neighborhoods), the disparity in small business lending is larger, with a small business lending rate in upper-income tracts 136 percent higher than in low-income tracts (Canner, 1999). Moreover, after controlling for income, firm population, industry, and other factors, minority tracts receive fewer loans than white tracts. In a study of the Philadelphia region, even after controlling for the average credit score of local firms and proximity to areas with high levels of lending, large differences remain in lending to white versus minority tracts (Immergluck, 2001).

Disparities in credit flows appear to be worsening. From 1996 to 1999, the rate of growth of CRA-reported small business loans in upper-income tracts in the U.S. was 13 times the growth in low-income tracts and almost twice that in moderate-income tracts. In three of five midwestern metropolitan areas examined by the Federal Reserve Bank of Chicago, small business loans declined in low-income tracts over this period, despite gains on the order of 20-30 percent in middle-and upper-income neighborhoods (Federal Reserve Bank of Chicago, 1998a, 1998b, 1999, 2000).

#### Consolidation, Mergers, and Small Business Lending

There are a number of reasons to be particularly concerned over the effects of bank consolidation on small business lending in central cities and modest-income suburbs. First, bank branch locations appear to be an important determinant of small business lending patterns, and mergers have been shown to result in branch declines in lower-income areas (Avery et al., 1999).

Another concern is the effect on minority-owned firms. Cavalluzzo et al. (1999) show that black-owned small businesses are denied loans at substantially higher rates than white-owned firms after controlling for a wide variety of factors and that the level of discrimination increases as the lending market becomes less competitive. In fact, Samolyk and Richardson (2001) find that small business lending growth rates in low- and moderate-income census tracts are smaller for banks that merge. Moreover, from 1996 to 1998, the change in a merging bank's share of all small business loans going to low- and moderate-income tracts was 13.6 percentage points lower (more negative) than for a similarly situated bank not involved in a merger.

#### Bank Branch Locations and Small Business Lending

The presence of branches in low- and moderate-income areas is a powerful determinant of whether an institution lends in such areas. A large bank with a branch in a typical low- or moderate-income census tract is 20 percent more likely to make a small business loan in the tract than an otherwise similar institution with branches in the same metropolitan area but not in the tract (Frame et al., 2001a). In an examination of small business lending in the Chicago area, we find that the ten institutions making the largest percentage of their loans to low- and moderate-income tracts (from 47 to 28 percent) have 43 percent of their branches located in low- and moderate-income zip codes. Conversely, the ten institutions making the lowest percentage of loans to low- and moderate-income tracts (from 3 to 11 percent) have only 11 percent of their branches located in low- and moderate-income zip codes. The decline in low- and moderate-income area bank branches is significant. From 1985 to 1995, two-thirds of the total decline in U.S. branches occurred in low- and moderate-income zip codes — many in central cities — even though these neighborhoods were home to only one-fifth of branches in 1985 (Avery et al., 1997).

#### De Novo Banks and Small Business Lending

Industry observers have frequently argued that any loss in service – including small business lending – due to bank consolidation is quickly replaced by new banks that fill market gaps. As merger activity increased in the late 1990s, so did the establishment of de novo institutions. However, mergers and acquisitions do not appear to result in an increase in small business lending by de novo banks (Berger et al., 2000). No other research to this point has examined the branch locations or geographic lending patterns of de novo banks. We find that, in the Chicago metropolitan area, only 11 of 111 de novo locations are in the city of Chicago. Of those, six are in or near the central business district. Only eight de novo locations, or seven percent of the 111, are in low- or moderate-income zip codes, compared to 14 percent of the offices of established institutions. Not surprisingly, we also find that the small business lending of de novos tends to focus more on higher-rather than lower-income areas. Therefore, de novo institutions are unlikely to be a substantial source of small business lending in central cities or low- or moderate-income areas.

#### Relationships, Credit Scoring, and Small Business Lending

One of the most dramatic changes in small business lending has been the adoption of credit scoring for marketing and underwriting many small business loans. The transaction costs of

traditional relationship lending meant that making small loans did not meet the profitability targets of some large banks. Conversely, small banks had traditional informational advantages, were closer to the customer, and were often more interested in small loans. Credit scoring for small business loans has turned this dynamic on its head. Because credit scoring is used for smaller loans, its increased adoption by larger banks has led to a substantial increase in the number of loans under \$100,000 made by large institutions.

Whether credit scoring will benefit or harm firms in central cities and lower-income areas is not entirely clear, and depends on the nature and credit quality of the particular firms. Credit scoring could lessen discrimination and redlining by reducing the role of bank personnel's racial biases in the underwriting process, especially for firms that were previously discriminated against and that are easily identified and/or approved by credit scoring methods. Frame et al. (2001a) show that the use of credit scoring has a modest positive impact on the level of small business loans made by large banks in low- and moderate-income census tracts.

On the other hand, credit scoring could have a negative "disparate impact" on firms in lower-income or minority areas for a variety of reasons. If there are more firms in such areas with marginal credit, then the average firm in such areas will be more expensive to lend to. Moreover, due to discrimination and other factors, many firms or would-be firms in lower-income areas may have little credit history and not qualify for scored loans. Finally, there continue to be significant problems with the accuracy of credit bureau information and, therefore, the reliability of credit scores.

#### **Small Business Loan Securitization**

In contrast to consumer and mortgage credit, the securitization of small business loans has not been very common. The exceptions are loans guaranteed by the U.S. Small Business Administration (SBA) and, to a lesser extent, the unguaranteed portion of SBA loans. Since 1994, approximately 40 percent of the guaranteed portions of SBA loans and 10 percent of the unguaranteed portions have been securitized (Federal Reserve, 2000). In the conventional market, securitization does not yet account for a significant portion of small business credit. The increasing use of credit scoring would appear to provide a key tool for the standardization and assessment of small business loans, which should in turn facilitate securitization. This effect has not yet materialized. There may be some lag, however, between the two developments, so it may be too early to assess the full impact of scoring on securitization.

From the perspective of the small firm, it is not entirely clear that wider use of securitization would lead to greater access to credit for small businesses in general. For relationship-based loans, securitization does not fundamentally improve information flows or enhance the ability to monitor loans (Bushaw, 1998). Securitization may increase competition for better small business credits or may, like credit scoring, increase the relative costs of banks' serving small businesses that are not amenable to standard credit-scored marketing and approval processes. As with credit scoring, securitization may provide a benefit for firms in central cities and modest-income suburbs that are good credit risks. However, for firms requiring more customized service or with weaker credit, securitization may create disadvantages.

#### Nonbank and Credit Card Sources of Small Business Credit

Banks have frequently complained about increasing competition from less regulated, nonbank lenders. While they have made some gains in market share, finance companies – banks' major competitor in small business lending – generally remain relatively modest providers of credit to small firms, except for motor vehicles, leases and, to a lesser extent, equipment loans. From 1987 to 1998, finance companies did gain users for most credit types, but these gains never accounted for more than 1.1 percent of small firms (Cole and Wolken, 1996; and Bitler et al., 2001).

Small firms personal credit card usage (for all purposes, including convenience and revolving credit), increased from 40.7 percent to 45.2 percent from 1993 to 1998, while business card usage increased from 28.8 percent to 33.3 percent. While these increases are significant, some may be related to business cycle effects and increased demand for credit overall. Generally, the use of small business lines of credit increased at roughly the same rate as that of credit cards.

While finance companies may not have gained substantial overall market share from banks, there is some evidence that banks may have lost share among minority-owned businesses. The proportion of black-owned firms using nondepository financial firms (for credit or other financial services) increased from 17.1 percent in 1993 to 28.7 percent by 1998 (Cole and Wolken, 1995; Bitler et al., 2001). While this increase in utilization is partly explained by the expanding economy, the growth was significantly faster than the increase in bank utilization by black-owned firms.

Business credit card use by black-owned firms has not increased as fast as among white-owned firms. Black firms increased usage from 27.9 percent to 28.8 percent, while white firms increased usage from 28.0 percent to 34 percent (Cole and Wolken, 1995; Bitler et al., 2001). Conversely, black-owned firms had a faster rate of increase for personal credit cards. Since personal cards are often priced at significantly higher rates than business cards, this trend gives some cause for concern.

#### Implications for Policy

Changes in banking and their effects on small business lending pose implications for a variety of public policies. We focus on those that we believe are particularly important, including implications for bank regulation as well as for community economic development policy.

#### A. Implications for Banking and Financial Services Regulation

Changes in small business lending in lower-income areas have a number of implications for bank regulation. First, CRA regulations and examinations should give more consideration to the location of small business lending. The strong disparities in growth in small business lending between higher- and lower-income areas in the late 1990s suggests that the large gains seen in CRA home mortgage lending are not being replicated in the small business arena. Of course, strengthening overall CRA enforcement, including reducing the very high proportion of banks

receiving Satisfactory and Outstanding ratings would provide a stronger incentive for banks to be more attentive to lower-income communities generally.

CRA has the potential to be a powerful tool to maintain or increase access to small business credit in central cities and modest-income suburbs. It appears to be dampening declines in small business lending in low- and moderate-income areas and may be having a positive effect on banks' lending in their assessment areas, but not in lower-income areas overall. Assessment areas continue to be based primarily on the location of bank branches, however bank branches are moving away from lower-income and central city areas. Assessment areas should include all areas in which a bank has a significant share of the small business lending market as well as areas where it has branches and other retail business. Assessment areas should also generally not consist of portions of metropolitan areas or counties, but be comprised of one or more MSAs or counties, especially for lenders making significant numbers of loans. This will limit the ability of lenders to "gerrymander" around lower-income areas. On a related matter, many large business credit card banks are currently exempt from any examination of their small business lending practices due to their ability to obtain "limited-purpose" bank status. Any large issuer of small business credit cards should be classified as a retail bank for CRA purposes and be evaluated under the CRA lending test in all market areas where they make significant numbers of credit card loans.

Publicly available CRA data are not as comprehensive as Home Mortgage Disclosure Act (HMDA) data. The public should have full access to all data submitted to regulators. In addition, banks should be required to report data on each loan application, including the race of firm owner. A step in this direction would be for the Federal Reserve to adopt its proposed recommendation to modify Regulation B to allow voluntary collection of such data by lenders.

Impacts on bank branch locations should receive more consideration in federal regulators' evaluation of bank mergers. Moreover, regulators should recognize that de novo institutions are unlikely to compensate for any decline in small business lending of merging institutions, especially in lower-income areas. Community advocates should monitor proposed mergers for branch locations and comment accordingly during the application process.

Regulators should continue to monitor the impacts of credit scoring technologies on fair lending and community reinvestment. In conducting CRA examinations, regulators should look beyond aggregate lending data to identify the type of lending being done. It is important to distinguish between small loans made primarily by automated means versus those involving relationships and human review.

Finally, the modest but significant gains in market share by finance companies and nonbank lenders provide some cause for concern. They confirm the need to expand CRA to nonbank financial institutions, including finance companies.

#### B. Implications for Community Economic Development Policy

As banks continue to merge, there is likely to be an increasing need for community development financial institutions (CDFIs), public-sector credit enhancement programs, and other initiatives that focus significant resources on lending to firms in lower-income areas and minority-owned businesses. Resources will need to be increasingly targeted toward lower-income and minority market segments. In many cases, there will be a need for institutions that focus attention on the most neglected segments of the market. While regular bank activity in these markets should continue to be encouraged through CRA and other means, alternative financial vehicles should also be supported.

The increased use of credit scoring to market, approve and monitor loans has major implications for small business finance initiatives. For example, it may make sense for some CDFIs and government programs to shift their focus from only smaller loans, which are being increasingly targeted by large banks – at least in the case of firms with stronger credit. They may want to consider a combination of smaller loans that do not meet the requirements of the new, more aggressive credit-scoring lenders as well as larger loans that relationship-lending banks are not making for a variety of reasons.

#### I. INTRODUCTION

Access to credit is a significant determinant of business development and growth. Credit is particularly important to the viability of small, young firms (Bates, 1993). Central cities and low- and moderate-income areas are often particularly vulnerable to credit access problems. While mortgage lending typically receives the greatest amount of attention in discussions of access to credit — especially when redlining or lending discrimination are broached — lending to small firms in central city and modest-income suburban areas is a persistent concern of policymakers and community developers.

The last two to three decades have brought a great deal of change in the banking and financial services industry. Lending to small firms is no longer primarily the domain of the small community bank. The dominant form of small business loan – the highly customized loan based on a relationship with an individual loan officer – is increasingly giving way to a more commoditized "high-tech-low-touch" transaction. Bank branches, where many small business lending relationships have occurred, have generally declined in lower-income communities.

The purpose of this paper is to examine some of the key changes in small business lending with a particular emphasis on their likely impact on firms in central city and modest-income neighborhoods. Limited data and a mix of objectives in the existing literature preclude definitive answers for a number of questions raised in this paper. However, what we do know about changes in small business lending raises a number of policy concerns and points to a variety of areas for further research.

There is significant evidence of problems in the distribution of small business credit across metropolitan space. Because central cities and modest-income suburbs are likely to have significantly more minority-owned firms, disparities rooted either in race of the business owner or the location of the firm will both have spatial effects. In terms of race of owner, minority-owned—especially black-owned – small businesses are denied loans at much higher rates than white-owned businesses after controlling for a wide variety of firm characteristics, including credit history. At the same time, small business lending volumes are lower – and denial rates higher – in minority neighborhoods even after controlling for neighborhood income. Loan-per-firm rates are significantly higher in higher-income neighborhoods and this disparity has almost certainly worsened considerably in the late 1990s as increases in small business loans reported under the Community Reinvestment Act in middle- and upper-income neighborhoods far outstripped gains in low- and moderate-income areas.

The first change in banking that will be explored for its effect on small business lending in central cities and lower-income areas has received a good deal of attention: the consolidation of the banking industry. Next, we examine changes in bank branch patterns over the last two to three decades. We identify the relationship between a local branch presence and the propensity of a bank to make small business loans in a small, submetropolitan area. We also describe changes in bank

branch patterns across intrametropolitan space and look at the relationship between mergers and branching patterns.

Related to the questions of bank consolidation and increasing scale is the role of newly chartered, or de novo, banks. De novos might be expected to act differently than larger, more established institutions both because they are smaller and because they are younger. In the wake of the very large mergers of 1998, a common assertion was that new banks would spring up to fill any voids left by the mergers. However, questions remain as to how well these new banks are likely to serve central cities and lower-income neighborhoods. Moreover, if bank branches are related to small business lending, it is important to consider the locations of these new institutions.

One very significant change in small business lending is the increasing use of automated underwriting technology – or credit scoring. Credit scoring can be used in a variety of ways by a lender. First, a lender can use credit scoring to automatically approve or reject certain types of loans – especially smaller ones. Second, credit scoring can be used to enhance the approval process by giving lenders more information, but not serving as a pure substitute for loan officers. Third, credit scoring can be used to identify potential borrowers for solicitation. Finally, credit scoring can be used to monitor existing borrowers. We discuss the potential positive and negative impacts of credit scoring on lending to small businesses.

Bankers have complained of increased competition in a variety of product areas from nonbank financial institutions over the last two decades. At the same time, many banking organizations have acquired nonbank institutions. If finance companies – a commonly cited competitor for small business lending – are increasing their presence in the small business loan market, this could have significant implications for firms in central cities and low- and moderate-income areas. These finance companies are not covered by the Community Reinvestment Act and are not subject to regular fair lending evaluations, though they are subject to fair lending laws.

One often discussed nascent development in small business lending is securitization. Securitization has the potential to increase the supply of capital to lenders, which could increase the supply of credit to small firms. The spatial impacts of securitization, however, are less clear.

The concern of this paper is primarily with changes in banking and access to private-sector credit. Public policies affecting banking structure and the general disposition of financial institutions toward lending in central cities and lower-income areas are considered. However, changes in specific economic development finance programs, such as specific SBA products, the Community Development Financial Institution Fund, and Economic Development Administration programs, are generally beyond the scope of this paper. Some of these programs have been and are important sources of small business financing, however, and they can influence the availability of small business credit, especially to younger and less-established firms. Thus, there is a brief discussion of implications for such programs and initiatives at the end of this paper.

#### II. SMALL BUSINESS LENDING ACROSS METROPOLITAN SPACE

There is substantial evidence that, after controlling for a wide variety of firm and local market characteristics (including credit quality measures), black-owned firms are denied small business loans at much higher rates than white-owned firms (Cavalluzzo et al., 1999; Blanchflower et al., 1998). Bostic and Limpani (1999) also find that the race of a majority of neighborhood residents and business owners plays a significant role in denial rates. Moreover, they find that the differential between denial rates in white and minority neighborhoods increases after the income of the neighborhood is included in their regression. This suggests that, independent of local market power and race of business owner, the predominant race of the people in the neighborhood can affect denial rates.

In 1997, banks and thrifts reported roughly the same number of loans per small business (defined as having less than \$1 million in sales) in central cities compared to suburbs (Canner, 1999). The ratio was 0.28 in central cities and 0.29 in suburbs. However, Table 1 shows that when tracts are disaggregated by income level, low- and moderate-income tracts in both cities and suburbs fare poorly. The small business lending rate is 45 percent higher in upper-income suburban neighborhoods than in lower-income suburban neighborhoods, and 42 percent higher in upper-income central-city tracts than low-income central-city tracts.<sup>1</sup>

Many central-city loans are made in census tracts with many businesses. Some of these tracts contain low-income residents but also contain parts of industrial or downtown business districts. While many businesses in central cities may be located in such places, most central-city neighborhoods are residential in character. Canner (1999) examines the lending differences between lower- and upper-income residential neighborhoods. As Table 2 shows, the lending rate in upper-income residential tracts is 136 percent higher than in low-income residential tracts.

In a multiple regression analysis, Canner (1999) also finds that minority tracts, after controlling for income, firm and residential population, industry, and regional location, receive fewer loans than white tracts. Immergluck (2001) uses similar data on 1998 small business lending patterns in the Philadelphia area and finds that, after controlling for income, firm and residential population, industry, and firm size, that black tracts receive far fewer loans than white tracts. Even after controlling for average credit score of local firms and the effects of proximity to areas with high levels of lending, large differences remain. Going from an all-white neighborhood to an otherwise equivalent, adjacent all-black tract results in a decline of 6.8 loans. Given a mean of 14.6 loans per tract, this is a large effect.

3

<sup>&</sup>lt;sup>1</sup> Because many government-enhanced loan programs involve guarantees of bank loans and because the scale of such programs are generally very small in compared to the number of conventional loans, it is very unlikely that including economic development financing program activity would significantly reduce the disparity here. Moreover, as shown in Immergluck and Mullen (1998b), such programs can actually favor higher-income and newer suburban areas.

Table 1. CRA-Reported Small Business Loans, 1997

Type of Metropolitan Census Tract	Number Firms of Loans		Loan-Firm Ratio	
Low-Income				
Central City	106,704	453,900	0.24	
Suburbs	7,704	35,600	0.22	
Cubarbo	7,704	00,000	0.22	
Moderate-Income				
Central City	232,018	943,400	0.25	
Suburbs	123,703	498,400	0.25	
Middle-Income Central City Suburbs	371,604 568,641	1,335,000 1,975,800	0.28 0.29	
Upper-Income				
Central City	303,134	890,000	0.34	
Suburb	359,050	1,139,200	0.32	
Total Central City Suburb	1,025,218 1,060,441	3,666,800 3,649,000	0.28 0.29	

Source: Calculated from data in Canner (1999)

Table 2. Loans to Firms with Less than \$1 Million in Sales in Residential Central City Neighborhoods, 1997

Central-City Residential Neighborhoods*	Number of Loans	Firms**	Loan-Firm Ratio
Low-Income	10,114	92,297	0.11
Moderate-Income	30,341	230,742	0.13
Middle-Income	65,738	369,187	0.18
Upper-Income	59,417	230,742	0.26

Source: Calculated from data in Canner (1999)

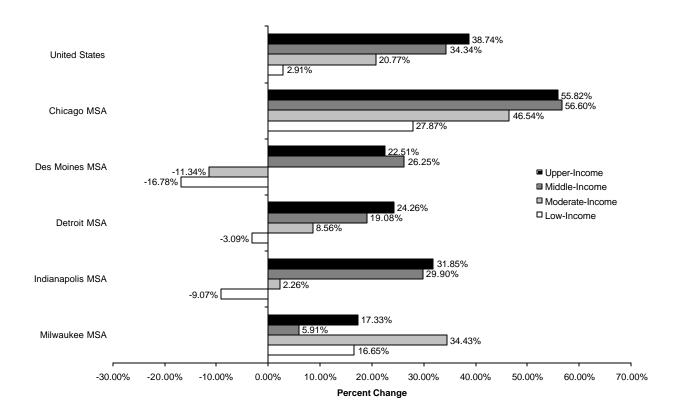
<sup>\*</sup> Residential neighborhoods are those that are *not* in the top quartile when ranking all tracts in income category by number of large (over \$1 million in sales) or small (under \$1 million in sales) firms. Figures are directly or imputed from Canner (1999).

<sup>\*\*</sup> Number of firms with less than \$1 million in sales are estimated from share figures in Canner.

Since 1996, changes in CRA regulations have required banks and thrifts with more than \$250 million in assets to report small business lending volumes by census tract. Figure 1 shows that from 1996 to 1999, the most recent year for which data are available, there were large gains in the number of reported loans in the U.S. and in a sample of five Midwestern metropolitan areas. However, gains in middle- and upper-income census tracts generally far outstripped gains in moderate- and especially low-income areas. For the U.S. as a whole, the rate of growth in reported small business loans in upper-income tracts was 13 times the growth in low-income tracts and almost twice that in moderate-income tracts. In three of the five metropolitan areas, small business loans declined in low-income tracts over this period, despite gains on the order of 20 to 30 percent in middle- and upper-income neighborhoods.

Some of the overall growth in reported loans may be due to mergers or bank growth transforming previously unreported activity (at small banks) into reported activity. However, more comprehensive call report data confirm increased small business lending activity in the 1990s. The dollar volume of outstanding small business loans increased by 20 percent (inflation adjusted) from 1994-2000, and the number of outstanding loans increased even faster (Ely and Robinson, 2001). More importantly, possible reporting shifts do not readily explain the very large differentials in growth between lower- and higher-income areas.

Figure 1. Change in Number of CRA Reported Small Business Loans, 1996-1999



Source: Calculated from Federal Reserve Bank of Chicago (1998a, 1998b, 1999, 2000)

#### III. CONSOLIDATION, MERGERS, AND SMALL BUSINESS LENDING

Since 1980, the banking industry has experienced significant consolidation. Relaxations of state and federal regulations on bank branching and structure have allowed merger and acquisition activity to reach all time highs. Between 1980 and 1998, there were approximately 8,000 bank mergers involving roughly \$2.4 trillion in acquired assets (Rhoades, 2000). From 1980 to 1999, the number of FDIC-insured commercial banking institutions decreased by nearly 41 percent (from 14,434 to 8,581) (Federal Deposit Insurance Corporation, 2001). Between 1989 and 1999, the number of independent banking organizations (the sum of bank holding companies and independent banks) decreased from 9,500 to 6,800. The 50 largest banking organizations held 74 percent of all banking assets in 1999 compared to 55 percent in 1989, and the ten largest banking organizations controlled 49 percent of all assets in 1999 compared to 26 percent in 1989 (DeFerrari and Palmer, 2001). Much of this top-end consolidation occurred in the latter part of the 1990s. The assets of the ten largest bank holding companies increased by 81 percent from March 1997 to December 2000, to top \$3.6 trillion (Federal Financial Institutions Examination Council, 2001).

Despite consolidation, the banking industry has continued to expand in terms of both assets and physical presence. From 1980 to 1999, commercial bank assets expanded from \$1.9 trillion to \$5.7 trillion (FDIC, 2001). Table 3 shows that, in 1999 dollars, this represents a 53 percent increase in assets. Over the same period, there was an increase of nearly 64 percent in the number of FDIC-insured commercial bank branches (excluding main offices) from 38,738 to 63,684. Including main locations, the number of offices of commercial banks increased by 36 percent.

Table 3. Changes in the Number of Commercial Banks, Branches, and Assets in the U.S., 1980-1999

	1980	1999	1980-1999
Institutions/Main Offices	14,434	8,581	-41%
Branches	38,738	63,684	64%
Total Offices	53,172	72,265	36%
Assets (billions of 1999 dollars)	\$3,752	\$5,735	53%

#### A. Bank Market Structure and Overall Small Business Lending Activity

The effects of consolidation and changes in bank size on small business lending activity have been a common topic for research over the last ten years. Most research has examined short-and long-run effects of mergers and acquisitions on the lending volume of the merging institutions or on overall small business lending volumes. No research has examined any explicit impacts on small business lending to central cities or lower-income areas. Moreover, as Dymski (2000) points out, much of this research has focused only on the overall *volume* of lending and has failed to account for changes in the quality of this lending. To the extent, as suggested by much of the research, that negative effects on lending volumes due to consolidation are being compensated for by a shift to

higher volume credit-scoring techniques (which larger banks tend to adopt), then growth in lending volumes may mask a decline in relationship-based loans. Nonetheless, despite the shortcomings of this research, it is important to understand the impacts on aggregate small business lending activity.

Small banks have traditionally been more active small business lenders than larger institutions, at least relative to their deposit or asset size. Small banks traditionally lend a greater proportion of their total assets to small businesses than larger banks. In 1996, banks with less than \$100 million in assets lent 9.2 percent of their assets to small businesses, while banks with over \$5 billion in assets lent only 3.4 percent of their assets to small businesses (Strahan and Weston, 1998). Of course, by sheer size, larger banks account for a large amount of small business lending, with banks with assets over \$5 billion accounting for 52.3 percent of small business loans in 1996 (Strahan and Weston, 1998).

To a limited degree, regulations constrain the extent that small banks can serve larger firms by prohibiting them from committing a substantial percentage of their assets to one borrower. More importantly, small banks may find it difficult to provide the more varied and sometimes more complex services required by larger firms, thus compelling them to focus more on smaller businesses, whose needs may be less extensive.

In addition, small banks may have certain advantages in their organizational structure over large banks that give them better access to certain types of key information in the small business lending process. Small business lending is more complicated than consumer or mortgage lending. Beyond information on the borrower, lenders often take into account the type of business, management experience, local markets, and existing and potential competition. Because of this informational complexity, higher costs and risk have been associated with small business lending.

Nakamura (1994) argues that small banks possess "inside information" on their borrowers due to relationships and checking and savings account histories. These types of relationships allow loan officers at small banks not only to access information on financial history not as readily available to other banks, but also to get to know firm owners well and to monitor cash flows and deposit activity. Small banks may also have unique knowledge of local markets not available to larger banks. Small banks may have a decision making structure within their loan departments that allow them to take certain risks on marginal borrowers based on the above-mentioned relationships, information, and flexible underwriting guidelines (Cole et al., 1999). Finally, small banks may be perceived to be, or may actually be, able to make decisions more quickly and with less bureaucracy than larger institutions.

Information about small business borrowers may be less readily available for large banks. The organizational structure of larger institutions may involve decision making centers located far from where the loan is being originated. Moreover, loan officer turnover at larger institutions may be higher, due to promotion or transfer, making relationships harder to create and maintain (Haynes et al., 1999).

Due to the scale and geographic scope of larger banks, they are more likely to utilize standardized lending policies, and allow less flexibility, resulting in more of a "cookie-cutter approach" to lending (Cole et al., 1999). This approach uses easily obtained financial information that is plugged into a bank's standardized criteria to approve or deny loans. (A later section will consider the effects of credit scoring in more detail.)

Due in part to the advantages and proclivities of small banks in relationship-based small business lending, large banks historically had less of a presence in this market segment. Recently, however, mergers and consolidation in the banking industry and advances in technology are changing the roles of smaller and larger institutions. As banks merge or larger banks acquire smaller banks, there is concern that the surviving institutions will decrease their small business lending activity, and that access to small business loans will decline.

In general, if two typical small banks merge and then take on the characteristics of the typical larg bank, we would expect the small business lending of the merged institution to be less than the sum of the two merging banks' lending. However, the total, long-run effect on small business lending depends on more than the short-run response of just these institutions. The effect of mergers on total small business lending in a market depends on a number of factors, including the dynamic, longer term response of other lenders (Mester, 1997).

Berger et al. (1998) describe four types of effects of mergers and acquisitions on the total volume of small business lending in a market: static, restructuring, direct, and external. The static effect is the change in lending levels as a result of combining the lending numbers of merged banks into a new, larger bank. The static effect typically yields a decline in lending volume when comparing the lending volume of the two merging institutions to that of the resulting larger one. This loss may be offset by dynamic effects: restructuring, direct, and external. The restructuring and direct effects relate to changes in the lending behavior of the newly merged institution. The static effect does not take into account changes in bank size, financial characteristics, local market competition, or any lending focus. When taken into account, these can reduce the negative impacts of the static effect. Further reducing this negative impact is the external effect, which is the response by other banks in the region to the merger. Those loans lost by the merged institution can be acquired by other lenders in the market. (The role of de novo institutions that might develop as a response to mergers will be treated in more detail in a later section).

In mergers and acquisitions (M&A), static effects tend to significantly reduce small business lending. A number of dynamic studies examine M&As impact on small business lending. Several find that in M&As in which one or more of the banking organizations is large, small business lending tends to decrease, while M&As between small organizations tend to increase lending. While these effects have been found to be substantially offset by the external effects, measurement problems make the net total effects somewhat unclear (Berger et al., 2000).

Peek and Rosengren (1998) argue that, in an acquisition, the acquired institution usually takes on the characteristics of the acquirer, regardless of whether the lender was a high- or low-

volume small business lender. They also note that as banks consolidate, the new larger institution may begin to use credit scoring for small business lending, and so may increase its smaller loan activity.

### B. Bank Consolidation and Small Business Lending in Central Cities and Low- and Moderate-Income Areas

The existing research on bank consolidation and its impacts on small business lending has been conducted largely at the metropolitan level or higher and has generally not attempted to identify neighborhood or central city effects. There are a number of reasons to be concerned about the effects of consolidation on bank lending in central cities and modest-income suburbs. First, as will be discussed more below, bank branch locations appear to be an important determinant of intrametropolitan small business lending patterns. Because mergers and acquisitions affect branch locations, they are likely to influence the geographic distribution of small business lending. Mergers and acquisitions provide key opportunities for the spatial restructuring of bank branch operations. Larger banks, especially, have often focused their acquisition strategies on increasing their market share in more affluent markets and, hence, may avoid acquisitions with large central city branch presences.

Another concern regarding consolidation and access to small business credit is the effect on minority-owned firms. Cavalluzzo et al. (1999) show that black-owned small businesses are denied loans at substantially higher rates than white-owned firms after controlling for a wide variety of credit factors. Moreover, they find that the unexplained difference between white and black denial rates – essentially the level of discrimination – increases as the lending market becomes less competitive. Thus, consolidation has the potential to increase disparities in access to credit. The larger presence of minority-owned firms in central cities and modest-income suburbs means that this will have a spatial as well as a racial effect.

The first study to directly measure the impact of mergers and acquisitions on small business lending in low- and moderate-income census tracts utilizes recent CRA small business lending data. Samolyk and Richardson (2001) find that small business lending growth rates in low- and moderate-income census tracts are smaller for banks involved in a merger. While growth rates of merging institutions in middle- and upper-income tracts are also smaller, the effect is somewhat smaller in magnitude.

More importantly, the share of small business loans going to low- and moderate-income areas declines significantly for banks that have been involved in merger activity (Samolyk and Richardson, 2001). From 1996 to 1998, the change in a bank's share of small business loans going to low- and moderate-income tracts is expected to be 13.6 percentage points lower (more negative) than an otherwise similar bank that was not involved in a merger. (The effect does not appear to be significant in the 1997 to 1999 period.) Interestingly, this effect is accounted for by changes outside banks' CRA assessment areas. Thus, merging banks generally shift away from firms in lower-income areas but not, as Samolyk and Richardson suggest, "those that count for CRA purposes."

This implies a CRA policy effect on small business lending patterns. It also carries implications for the way CRA assessement areas are delineated. (This will be discussed below.)

#### IV. BANK BRANCH LOCATIONS AND SMALL BUSINESS LENDING

Because small business lending has traditionally been a relationship-intensive process, at least when compared to more commoditized consumer and mortgage loans, the location of bank branches should be an important factor in the geographic distribution of small business loans. In addition to the effects of consolidation on branches, the expansion or contraction of banks and the development of de novo institutions may affect branch location patterns.

Branch locations may influence small business lending patterns for several reasons. Small business lending often involves loan officers making in-person calls on firms. Loan officers often have distinct submetropolitan market areas that may be partly determined by branch locations. At the same time, small businesses may prefer to do business with an institution that is conveniently located and where they can easily take and receive cash or transact other business.

The difficulty of assessing small business creditworthiness (sometimes referred to as the "opacity" of the small business transaction or borrower) has traditionally required lenders to be located relatively close to their borrowers. This is especially true for smaller, younger firms (Mitchell and Rajan, 2000). Banks, in particular, have focused on more opaque borrowers (often smaller and younger firms) relative to finance companies, in part due to their competitive advantage in having an extensive branch network and so being able to maintain closer proximity to borrowers. Traditionally, firms that borrowed from distant lenders were only the highest quality credits (Mitchell and Rajan, 2000).

In a study of the small business lending of 99 large banking organizations in six southern states, Frame et al. (2001a) find that the presence of branches in low- and moderate-income areas is a powerful determinant of whether an institution lends in such areas. A large bank with a branch in a typical low- or moderate-income census tract is 20 percent more likely to make a small business loan in the tract than an otherwise similar institution with branches in the same metropolitan area but not in the tract.

Immergluck and Wiles (2000) find that the lenders in the Chicago area devoting the highest shares of their small business lending to low- and moderate-income areas tend to be institutions with significant numbers of branches located in or near such communities. Similarly, those with low percentages of loans to low- and moderate income areas tend to have branches located farther from such areas. Similar results have been found in Milwaukee (Squires and O'Connor, 2001).

Figure 2 maps the branch locations of two sets of active small business lenders (active lenders are defined as the 57 banks or thrifts making at least 100 small business loans in 1999) in Cook County, the largest county in the Chicago area. Stars indicate the locations of the ten institutions making the highest percentage of loans to low- and moderate-income census tracts. Circles represent the locations of institutions with the smallest percentage of loans to low- and moderate income tracts. The ten institutions making the largest percentage of their loans to low- and moderate income tracts (from 47 to 28 percent) have 43 percent of their branches in low- or

moderate-income zip codes. Conversely, the ten institutions making the lowest percentage of loans to low- and moderate income tracts (from 3 to 11 percent) have only 11 percent of their branches in low- or moderate-income zip codes.

The relationship between branch locations and small business lending is particularly important given the shift of bank branches out of low- and moderate-income areas over the last two to three decades. Because of concerns about redlining and the Community Reinvestment Act, there has been a significant amount of research done on the location of bank branches (Campen, 1993; Pollard, 1996; Avery et al., 1997). Avery et al. (1997) find that, nationally, branches per capita increased from 1975 to 1985 due in part to relaxations of intrastate branching restrictions. From 1985 to 1995, however, the number of branches per capita declined. Low- and moderate-income zip codes – many in central cities – accounted for two-thirds of the 1985-1995 decline, even though they accounted for only one-fifth of branches in 1985.

In a later paper, Avery et al. (1999) found that mergers involving branches within the same zip code (a "within-zip" merger) resulted in less per capita growth in branches than other mergers, due to the actions of the merging banks. Zip codes that contained more bank branches affected by within-zip mergers experienced less growth in branches. Moreover, this negative effect of mergers on branch growth was exacerbated in lower-income zip codes. Thus, when banks with branches in the same zip code merge, they tend to reduce branches and to reduce them further when located in lower-income areas. Even mergers of banks without branches in the same zip code but with a presence in the same metropolitan banking market (within-market-but-not-within-zip mergers) result in fewer branches in low-income zip codes (Avery et al., 1999). No such effect is found in higher-income areas.

## FIGURE 2 LOCATED AT THE FOLLOWING SITE: http://www.brook.edu/es/urban/publications/immerglucklendingexsum.htm

#### V. DE NOVO BANKS AND SMALL BUSINESS LENDING

During the "megamerger" boom of the late 1990s, there was significant attention given to the phenomenon of new start-up banks, or "de novo" institutions. Industry commentators often argued that any loss in service due to consolidation would be compensated for by the establishment of new banks that would fill any market gaps. The frequent concerns over the effect of consolidation on small business lending were frequently addressed this way, in part because smaller banks are generally assumed to be more active small business lenders.

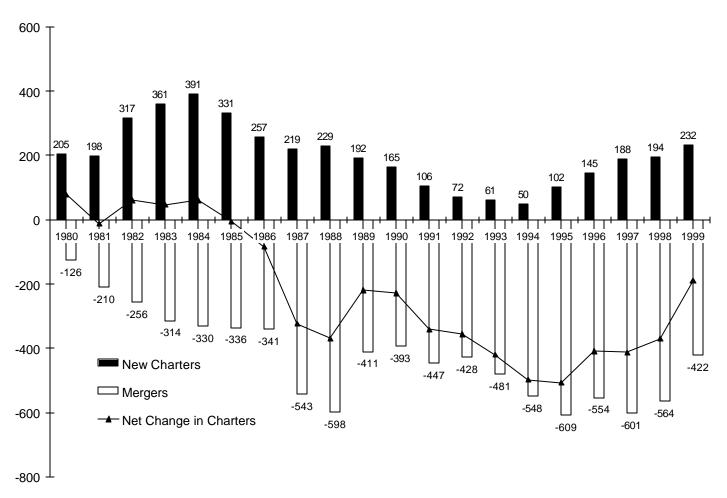
There were many more de novo commercial bank charters in the 1980s than the 1990s in the U.S. Figure 3 shows that there were over 190 every year in 1980s, with a high of 408 in 1984. One reason for the boom in de novos may be the liberalization of charter policy beginning in 1980s, when the Office of the Comptroller of the Currency began to pay less attention to the community's "capacity" to support an additional bank in granting national bank charters (Berger et al., 2000). State unit banking laws restricting intrastrate branching as well as stronger interstate banking restrictions also played a role.

After slowing in the late 1980s, the chartering of de novos picked up in the late 1990s about the time that merger activity reached its peak. New charters increased from only 50 in 1994 to more than 100 in 1995 and to almost 200 by 1998.

There is evidence that de novo institutions focus a substantially greater share of their activities on small business lending than do older banks. Figure 4 shows that the portion of assets devoted to small business loans declines roughly linearly with bank age for about the first twenty years of a bank's life, starting at more than 12 percent in early years to a minimum of 8 percent in year twenty (DeYoung, Goldberg, and White, 1999). Thus, every five years, the portion of assets devoted to small business lending drops about 1 percentage point. In the first five years, this amounts to about an 8 percent decline (12 percent to 11 percent of assets) in small business lending.

The effect of bank age on lending holds after controlling for bank size, market concentration and holding company affiliation. There are a number of likely explanations for de novos' emphasis on small business lending. First, young banks may find it easier to lend to small emerging firms than to steal larger business customers away from incumbent banks (White, 2000). The new banks may not offer the range of services demanded by larger firms. Also, smaller, younger banks may appear less intimidating to a young firm and may offer more intimate, personalized service.

FIGURE 3. CHANGES IN NUMBER OF COMMERCIAL BANKS DUE TO MERGERS AND DE NOVO CHARTERS, 1980-1999



Source: Federal Deposit Insurance Corporation, updates Figure 1 in DeYoung, Goldberg, and White (1999).

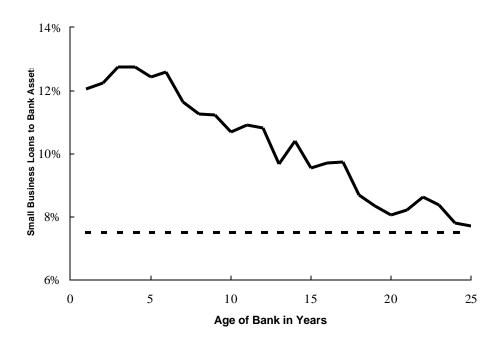


Figure 4. Ratio of Small Business Loans-to Assets, by Age of Bank, 1993-1996 Cumulative

Source: DeYoung, Goldberg, and White (1999)

De novos are also likely to begin by concentrating on a small geographic area, so small businesses, many of which may prefer a nearby bank, are a logical target. Moreover, if de novos employ managers and loan officers displaced from a larger established institution, these personnel may be able to take some of their clients to the new bank (White, 2000).

As a bank gets older, it is likely to lose some of the features that cause it to favor small firms. Some commercial customers may also outgrow it. There is also the possibility that the culture of the bank will change, with management becoming "less hungry" for new business (White, 2000).

Another determinant of the small business lending activity of a small bank is whether it is an affiliate of a multibank holding company (MHBC). The average affiliate of an MHBC does 6 percent less small business lending than an otherwise equivalent freestanding bank (White, 2000). If the bank began as part of a holding company, it is expected to make 18 percent fewer loans. One possible reason for this difference is that affiliates of MBHCs may have access to a wider range of investment opportunities through their parents and affiliates. MHBCs may also have management constraints that make small business lending more difficult.

Do de novos increase when mergers and consolidation increase in a local market? If so, does such activity compensate for a decline in small business lending by the merged institutions? Berger et al. (2000) find that mergers and acquisitions are responsible for more than one-fifth of de novo entry. In small metropolitan areas, the share of de novos due to M&As is even higher (30 percent), and larger effects are found in later years (1995-1998) than in the 1980s and early 1990s. However, mergers and acquisitions do not appear to result in an increase in small business lending by de novo banks (Berger et al., 2000). A doubling of merger and acquisition activity from the mean level actually results in a small decrease in lending by small young banks and a very small increase by mature small banks. <sup>2</sup>

As discussed above, branch locations have a substantial impact on the small business lending patterns of banks. No research to this point has examined the branch locations of de novo banks. Figure 5 illustrates the current (2001) office and branch locations of established banks and de novos in the Chicago metropolitan area.<sup>3</sup> The de novo locations tend to be located farther from the central city and in more affluent suburbs than branches overall. Many of them are located in the affluent North Shore or northwest suburbs of Cook County, and in more affluent sections of DuPage and Lake counties. Of the 111 de novo locations, only 11 are in the city of Chicago, and six of those are in or near the central business district. There are more de novos located in relatively sparse McHenry and Kane Counties than in the entire city of Chicago. Only eight de novo locations, or 7 percent of the 111, are in low- or moderate-income zip codes, compared to 14 percent of the offices of established institutions. (It is important to note that many de novo institutions are subject to the "small bank" version of the Community Reinvestment Act regulations. Under this version, banks with assets of less than \$250 million are not subject to an analysis of bank branch locations.)

In the 1995-1998 period, Berger et al. (2000) find a modest increase due to de novos after mergers, but the result is not statistically significant.
 De novos here are defined as banks with charters dating between 1990 and 1999 and with assets of less than

<sup>&</sup>lt;sup>3</sup> De novos here are defined as banks with charters dating between 1990 and 1999 and with assets of less than \$500 million in 2001. The few larger banks with recent charters are excluded to guard against new charters representing acquisitions, etc.

## FIGURE 5 LOCATED AT THE FOLLOWING SITE: http://www.brook.edu/es/urban/publications/immerglucklendingexsum.htm

We can also examine the small business lending patterns of the de novo banks in comparison to those of established lenders. Based on 1999 Community Reinvestment Act data, the de novo banks made small business loans that comprised 1 percent of all loans in low- and moderate-income census tracts in the six-county Chicago area. At the same time, they made 1.22 percent of the small business loans made in middle- and upper-income tracts in the region. Thus, compared to other banks, the de novos focus 22 percent more on middle- and upper-income areas than on low- and moderate-income areas.

De novo institutions are unlikely to be a substantial source of small business lending in central cities or low-mod areas. They are likely to locate in relatively newer and more affluent suburban areas generally far from the central city. Given that existing evidence does not suggest that de novos provide any compensatory response to declines in overall small business lending from bank mergers, it seems clear that the recent rise in de novos is not likely to improve access to credit for small firms in central cities and low- and moderate income areas.

#### VI. RELATIONSHIPS, CREDIT SCORING, AND SMALL BUSINESS LENDING

One of the major changes in small business lending in the last two to three decades has been the significant adoption of automated underwriting technologies – or credit scoring – for marketing and underwriting many small business loans. A lender may use credit scoring to automatically approve or reject certain types of loans, to enhance the approval process by giving lenders more information, to identify potential borrowers for solicitation, and/or to monitor existing borrowers. Larger banks have used credit scoring to increase the volume of smaller loans – especially those under \$100,000.

Traditionally, small business lending has been more dependent on relationships between borrower and loan officer than mortgages and consumer loans, which have generally been more transaction-driven. Cole (1998) finds that firms are more likely to obtain loans from lenders with which they have a relationship of some sort. Relationships give lenders access to information from checking and savings accounts, other loans or financial management experiences. As information on small businesses and their owners is increasingly made available through other means (credit bureaus and credit scores), the advantage of relationship-based information is diminished and relationships may become less important, at least to the lender.

In 1995, a survey by the American Banker of 150 U.S. banks showed that only 8 percent of smaller (less than \$5 billion in assets) banks used credit scoring for small business loans, with 23 percent of larger banks using it (Mester, 1999). Also in 1995, Fair Isaacs, the dominant provider of credit scores for mortgage transactions, introduced its small business scorecard. By 1997, the Federal Reserve's Senior Loan Officer Survey showed 70 percent of large banks using credit scoring in small business lending, with 58 percent stating that they usually or always use it.

Frame and other researchers at the Federal Reserve Bank of Atlanta. (2001b) examine the use of credit scoring of 99 of 200 largest banking organizations in U.S. As of January 1998, 63 percent of these institutions used credit scoring. All of these banks used scoring for all loans under \$100,000, and 74 percent of them used it for all loans under \$250,000. Only 21 percent of the scoring banks used scoring for larger loans.

Banks use credit scoring in different ways and for different types of loans. While much has been discussed about the effect of credit scoring on the loan approval process, the technology has had a large effect on the marketing of small business loans. Credit scoring allows lenders, especially large ones, to mine small business databases and find strong borrower prospects over broad geographic areas. The Consumer Banker Association (a trade association of large banks) survey found that a quarter of respondents had mailed preapproved small business applications in 1996, while almost none did in 1992 (Feldman, 1997).

In the approval process, credit scoring is sometimes used as the primary underwriting tool, so that loans may be automatically rejected or approved if certain low or high scores are attained. Frequently, loans with scores in some middle range are then subjected to human review. In the

Federal Reserve Bank of Atlanta survey of large banking organizations, credit scoring was used for the automatic approval or rejection of loans by 42 percent of the scoring banks (Frame et al., 2001b). Some banks, however, may use credit scoring only as a complementary tool, to provide the loan officer or credit committee with additional, standardized information. Scoring can also be used to set interest rates or other loan terms. Of the scoring banks in the Atlanta Fed survey, 32 percent used scoring for such a purpose (Frame et al., 2001b). Only 13 percent of the scoring banks had developed their own credit score model.

#### A. Credit Scoring and Competition for Small Business Loans

A bank may receive many benefits from using credit scoring. These include eliminating some documentation, reducing costs, improving loan performance, increasing volume and market share, making lending policies more uniform, controlling regulatory risks, extending its geographic reach, reducing approval times, and improving customer service (Feldman,1997; Eisenbeis, 2000). Some of these benefits may stem more from use of the technology in underwriting or processing applications while others may arise from using the technology to help market products or monitor borrowers.

Large banks are clearly a major beneficiary of credit scoring technology. Wells Fargo was a large early user of scoring and was able to gain significant market share in locations far from its branch network (Immergluck and Mullen, 1998a). The cost advantages to large volume lenders can be significant. A study by the Business Banking Board found that the traditional loan approval process averages about 12.5 hours per small business loan and that lenders can take two or more weeks to process a loan. Credit scoring can reduce approval times to one hour or less (Allen, 1995). Credit scoring has also been particularly attractive to large banks because there can be significant fixed costs to implementing a system.

The transaction costs of traditional relationship lending meant that making small loans – especially those of less than \$50,000 to 75,000 – did not meet the profitability targets of some large banks. Because of their variety of options, larger banks might be less likely to make very small loans to firms through traditional means. Conversely, small banks had a traditional informational advantage and were closer to the customer.

Credit scoring for small business loans has turned this dynamic on its head. By lowering marketing and/or transaction costs dramatically, credit-scored small loans can be relatively profitable for a large bank. Because credit scoring is used for smaller loans, its increased adoption by larger banks has led to a rapid increase in the number of loans under \$100,000 made by large institutions. The use of credit scoring is expected to increase the percentage of a bank's portfolio devoted to loans under \$100,000 by 8.4 percent (Frame et al., 2001b). Figure 6 shows that loans of under \$100,000 grew by almost 20 percent for banks with more than \$5 billion in assets from 1996 to 1997, after adjusting for mergers. Meanwhile, small banks saw these small loans grow at a slower rate than larger loans. This suggests large banks captured significant market share in the small loan market during this short period. (Note that small loans by all banks grew at approximately the same

rate as all commercial and industrial loans.) Large-scale lenders may be more likely to use credit scoring to solicit customers, screen applications, and extend credit, while community banks may use the technology more to sort applicants or as one of several factors in decision-making (Zhang and Austrian, 1996).

#### B. Segmenting the Market: Cookie Cutter vs. Relationships

In addition to affecting the relative market shares of large and small banks in the small loan market, credit scoring may have a variety of other effects. It may affect the overall supply of small business loans, the relative cost of credit to different types of firms, the competition for certain types of borrowers in a local market, and the overall availability of traditional, relationship-based small business loans.

By lowering the average cost of making a small business loan, credit scoring may increase the overall number of small business loans – especially those under \$100,000 – and therefore lower the cost of such loans. At the same time, Figure 6 does not suggest such an effect – merely a shift in market share from smaller to larger banks.

By extending a lender's geographic range for marketing or underwriting (by substituting score data for relationship-based information) credit scoring may increase competition in local banking markets. This may, in turn, lower the average borrowing costs of small firms— at least for borrowers being offered and qualifying for credit-scored loans.

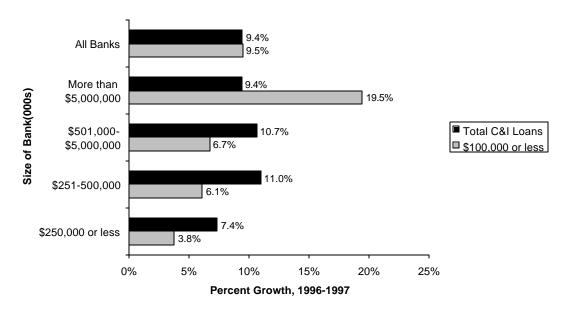
Petersen and Rajan (2000) find that the average distance between small business lender and borrower has been increasing over time. For banks, the average distance between bank and borrower has increased from 16 miles for relationships beginning in the 1970s to 68 miles for relationships begun in the 1990s. (This increase is not due to different firm locations or bank consolidation directly). Petersen and Rajan argue that this change is due to increased availability of credit records and credit scoring. In the past, only the very best credit risks could be located far from the lender. The improved availability of credit information has reduced the importance of distance.

Credit scoring may lower the overall absolute costs of small business lending to firms that are automatically approved, but at the same time, may greatly increase the relative costs of making loans to marginal firms that require more flexibility and loan officer attention. Borrowers requiring human review entail higher costs than those that can be credit scored. This is especially true as the number of relationship-based non-scored loans decreases and the fixed costs involved in such lending (including people) is spread out over fewer loans. It is possible that the absolute, and not just the relative, cost of relationship lending will increase with the continued adoption of credit scoring.

Figure 6. Merger-adjusted Growth of Commercial and Industrial Loans at U.S.

Commercial Banks by Size of Bank and Size of Loan

June 1996 - June 1997



Source: Federal Reserve Board (1997). Based on call report data.

Note: The volume of loans in each bank size category was increased by the sum of loans at banks that entered less the sum of loans at banks that departed the category during the year.

Credit scoring almost certainly has implications for firms in central cities, especially minorityowned firms and those in lower-income areas. However, whether credit scoring will benefit or harm such firms is not entirely clear, and will depend on the nature and credit quality of the particular firms.

There is substantial evidence that, after controlling for a wide variety of firm and local market characteristics (including credit quality measures), black-owned firms are denied small business loans at much higher rates than white-owned firms (Cavalluzzo et al., 1999; Blanchflower et al., 1998; Bostic and Limpani, 1999). Cavalluzzo et al. (1999) show that these differentials are sensitive to local banking market competition and suggests that such sensitivity supports a notion of pure discrimination as a cause of high denial rates for black-owned firms. If pure discrimination is a major barrier to black-owned firms obtaining small business loans, then standardized application of credit scoring could reduce such discrimination by reducing or eliminating the role of bank personnel's racial bias in the underwriting process.

Similarly, Bostic and Limpani (1999) find a similar race-based denial rate effect, but also find that the race of the residents and business owners in the neighborhood plays a significant role in denial rates. Moreover, they find that the differential between denial rates in white and minority

neighborhoods increases after income of neighborhood is included in their regression, suggesting that race, and not local market power, is a stronger predictor of denial rate.

Thus, credit scoring, if it is applied uniformly and replaces the processing of applications by racially biased loan officers, might be expected to improve access to credit, at least for firms that were previously discriminated against or redlined and that would have been easily identified and/or approved by credit scoring methods. For black-owned firms and firms in minority areas that are very strong financially, credit scoring may well offer more credit opportunities.

In a study of six southern states, Frame et al. (2001a) show that the use of credit scoring has a modest positive impact on the volume of small loans (under \$100,000) made by a large bank in low- and moderate-income census tracts. A bank using credit scoring is expected to make 3.8 percent more small loans in a typical low- or moderate-income tract. It is expected to make 1.7 percent more in middle- or upper-income tracts. (This study includes rural as well as metropolitan tracts, and the effects in rural areas are a bit stronger than those in metropolitan areas.) This finding is consistent with the notion that credit scoring can increase the geographic reach of a lender. Since most large banks have more branches in middle- and upper-income tracts than in low- and moderate income ones, it is not surprising that credit scoring would enable them to improve their marketing and lending in low- and moderate-income areas. Moreover, if credit scoring is used in a way that replaces discrimination or redlining in human decisions, such an effect is expected.

While credit scoring may benefit some firms in central cities and lower-income areas, its increased use may not benefit all such firms. Credit scoring could have a negative "disparate impact" on firms in lower-income or minority areas for a variety of reasons. There are a number of common concerns cited with credit scoring regarding small business lending to minority-owned firms or firms in lower-income areas. First, credit scoring models are not necessarily causal ones. The variables employed are used because they happen to add predictive value to the model. Some question the fairness of models that downgrade applicants with little credit history, suggesting that they, in effect, provide a barrier to entry to small business formation. If discrimination in the credit market is substantial, as the evidence suggests, many firms or would-be firms may have little credit history due, in part, to such discrimination. Finally, there continue to be significant problems with the accuracy of credit bureau information and, therefore, the reliability of credit scores.

Another common criticism of credit scoring models is that it is unclear how predictive models built on large samples of loans may be for firms that are somehow atypical. Some have argued that, due to differences in the market context of lower-income or ethnic communities, generic scoring systems may lead to poor predictability for borrowers in these segments.

Lackafer and Rosen (1996) show that loan performance may not correlate well with credit history if the history is limited or nonexistent. They compare two zip codes in Oakland, California: one low-income and one affluent. They find that the difference in the proportion of residents with credit scores below 620 is only 5 percentage points (30 percent vs. 25 percent). However, 23 percent of residents in the poor community do not have any score compared to 10 percent in the

affluent one. The difference in loan approvals is 23 percent vs. 42 percent, suggesting that the lack of credit history may sometimes be a more important predictor of credit access than poor credit history.

In addition to marketing and approvals, credit scoring is sometimes used by lenders to develop risk-based pricing, in which firms with weaker credit scores are given loans at higher interest rates. While this may be efficient from the lender's perspective, and may enable more high-risk firms to receive loans, risk-based pricing can have negative impacts on high-risk firms that were previously obtaining credit at lower, non-risk-based rates.

For financially strong borrowers needing smaller loans, credit scoring should provide a significant benefit. This benefit may be particularly important in central cities and low- and moderate income areas where relationship lenders may have discriminated against or ignored such firms. For financially weaker borrowers, however, credit scoring may bring real costs. They will be seen as less attractive, more costly borrowers. To the extent that central cities and low- and moderate-income areas have more struggling firms, credit may become more expensive or scarcer. The former is more likely if risk-based pricing and securitization in the small business market is adopted at significant scale. (Securitization is dealt with more extensively in the next section.)

So the credit-scoring trend works in both directions for central cities and modest-income suburbs, in part because the market for small business credit is a dual market. One segment is for high-volume, low-cost credit scored lending and one for traditional relationship credit. For firms in central cities and low- and moderate income areas that are in need of traditional, relationship-based credit, this segmentation of the market is likely to have negative effects.

### VII. SMALL BUSINESS LOAN SECURITIZATION

The securitization of consumer and mortgage loans is perhaps the most significant development in financial markets in the last four decades. Securitization is the process by which pools of loans are used as collateral for securities that are then purchased by investors. This process provides lenders with a great deal of liquidity, enabling them to make more loans. The pools of loans are assessed for risk, and enhancements can be added to make the securities sufficiently safe for investors. Enhancements may take several forms. Securities may be overcollateralized, so that the face amount of assets exceeds the face amount of securities. Another form of enhancement provides that some portion of the cash flow from loans goes into a loss reserve. Securities can also be segmented into investment-grade and riskier subordinate portions, or traunches. The latter are used to pay off any losses so that higher-grade investors are protected.

In contrast to consumer and mortgage credit, the securitization of small business loans has not been very common. The exceptions are SBA-guaranteed loans and, to a lesser extent, the unguaranteed portion of SBA loans. The guaranteed loans are inherently less risky due to the government guarantee. The unguaranteed portion is more standardized than other small business loans and so easier to securitize. Since 1994, approximately 40 percent of the guaranteed portion of SBA loans have been securitized (Federal Reserve System and Securities and Exchange Commission, 2000). Approximately 10 percent of the unguaranteed portions have been securitized.

In the conventional market, securitization currently does not account for a significant portion of small business credit. In 2000, there were approximately \$210 billion in commercial and industrial loans of \$1 million or less on the books of banks. Yet in 1999, only about \$2 billion of conventional small business loans were securitized, including unsecured SBA portions (Federal Reserve System and Securities and Exchange Commission, 2000). From mid-1992 to mid-2000, there were only 64 issuances of small business loan-backed securities.

Because lenders need to generate sufficient loan volume to support securitization programs, they are more likely to securitize types of loans that are easily standardized in credit quality and pricing (Bushaw, 1998). Such standardization can reduce the flexibility traditionally found in relationship-based small business lending. For example, once loans are securitized, they may be difficult to renegotiate. It may also become difficult to raise defenses against the holder – or assignee – of the loan.

There have been a number of attempts to develop a more roubust small business loan secondary market. The Riegle Community Development and Regulatory Improvement Act of 1994 included several policy changes aimed at increasing the prospects for small business loan securitization, including:

- Allowing national banks, federal thrifts, and credit unions to invest more in such securities;
- Preempting state registration requirements and investment restrictions; and
- Reducing risk-based capital requirements.

These changes appear to account for a significant increase in securitization in the late 1990s. As shown in Figure 7, the volume of securitizations nearly doubled in both 1998 and 1999 as a few large banks joined finance companies such as the Money Store and AMRESCO in issuing securities. From 1993 to 1999, the Federal Reserve and the Securities and Exchange Commission documented 14 nonbank and five commercial bank sellers of securities backed by conventional small business loans or the unguaranteed portion of SBA loans.

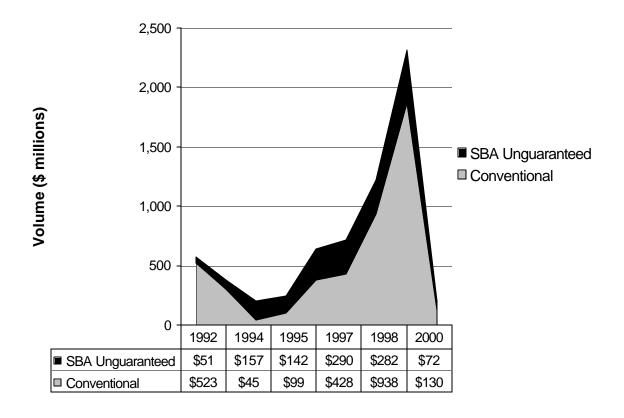
Beyond the 1994 Riegle Act changes, another reason for the increase in securitization volume in 1998 and 1999 may be a 1997 relaxation of SBA regulations that previously prohibited banks from securitizing the unguaranteed portion of 7(a) loans. However, the SBA later required lenders to keep responsibility (or recourse) for some portion of the loans, which may have dampened the interest in securitizing the unguaranteed portion of SBA loans. As Figure 7 shows, securitization activity declined rapidly in the first half of 2000. In addition to the change in SBA policy, the drop in activity might have been due to uncertainty over proposed accounting rule changes that would have precluded treatment of many loan sales as true sales when sold by FDIC-insured institutions.

As they become more comfortable with the process, a few banks have securitized a larger volume of conventional loans. But it seems that the vast majority of banks have not shown much interest in selling or securitizing loans. There are a variety of possible reasons for the continuing lack of interest. For example, the profit margins may be too thin, or banks may want to keep loans on their books to keep their assets large.

Community banks would typically not have the volume to support securitization of their own small business loans. Consequently, there have been recurring discussions of the need for an intermediary – similar to the secondary market firms in the student loan and mortgage industries – that could purchase whole loans from community banks and pool them for securitization. Some have suggested a federal role for such an effort, as with the government-sponsored Freddie Mac and Fannie Mae, but the climate in Washington has led others to suggest wholly private alternatives. In 1996, CFI ProServices Inc and TIS Financial Services created a private venture named Lori Mae. Lori Mae was envisioned as a securitizer serving community banks with loans of under \$250,000. The project was suspended in 1998 (Yago and Pankratz, 2000).

The increasing use of credit scoring would appear to provide a key tool for the standardization and assessment of small business loans, which should in turn facilitate securitization. It is not clear that this effect has materialized, at least to this point. There may be some lag, however, between the two developments, so it is too early to assess the full impact of credit scoring on securitization.

Figure 7. Securitization of Unguaranteed Small Business Loans 1992-2000



Source: Federal Reserve System and Securities and Exchange Commission (2000)

Note: 2000 figures were estimated based on January-June data.

The largest impediment to widespread securitization may be a lack of interest on the part of lenders. Most banks have been well capitalized in recent years, and many have been looking to increase portfolios rather than shrink them. Moreover, the banks that are doing the most high-volume standardized lending are relatively large institutions with significant alternative funding sources. In recent years, in fact, several large banks have purchased large mortgage companies that had raised funding through securitization. Some of these purchases were likely motivated by banks' ability to fund loans with their deposits or other funds rather than through more expensive securitization.

From the perspective of the small firm, it is not entirely clear that securitization will lead to greater access to credit for small businesses in general. At least for relationship-based loans,

<sup>&</sup>lt;sup>4</sup> Examples include the purchase of the Money Store by First Union, the purchase of Advanta Mortgage's mortgage business by J.P. Morgan Chase, and the purchase of IMC's mortgage business by Citigroup.

securitization does not fundamentally improve information flows or enhance the ability to monitor loans (Bushaw, 1998). Securitization may increase competition for better small business credits or may, like credit scoring itself, increase the relative costs of banks serving small businesses that are not amenable to standard credit-scored marketing and approval processes. If securitization does take hold in the small business market, it is likely to increase the differential in costs between relationship and credit-scored lending, because the latter would prove more liquid. So again, for firms in central cities and modest-income suburbs that are strong credits, securitization may provide a benefit. But for firms requiring relationship-based credit, securitization may create some disadvantages.

### VIII. NONBANK AND CREDIT CARD SOURCES OF SMALL BUSINESS CREDIT

While commercial banks are the largest source of formal nontrade financing for small firms, there are other sources, including finance and leasing companies. In the mortgage industry, banks and thrifts have generally seen their share of home mortgages decline dramatically since the 1970s, to the point where more than half of all mortgages are made by mortgage or finance companies. The Deposit Institutions Deregulation and Monetary Control Act of 1980 and the Garn-St. Germain Depository Institutions Act of 1982 expanded the number and types of financial institutions providing business credit (Cole and Wolken, 1995). Finance companies, in particular, have frequently been cited as an increasing form of competition for banks in small business lending.

Indeed, the important trend of credit scoring and the potential of securitization could provide opportunities for finance companies to increase their competitive advantages in the small business lending market. The traditional advantages banks have in small business lending, including proximity to the borrower and superior information (due to its relationship with the firm) are reduced by credit-scored lending. Credit scoring gives others access to very good information about many firms. It also enables them to market over long distances. Without the expense of an extensive branch network, finance companies might be expected to undercut bank competition.

Table 4 compiles data from the 1987, 1993 and 1998 Federal Reserve National Surveys of Small Business Finances (NSSBF). For six types of small business credit, including lines of credit, mortgages, equipment loans, motor vehicle loans, leases, and "other," it indicates the proportion of small firms using banks, thrifts, or finance companies. The table indicates that, indeed, fewer firms used banks and thrifts for financing (from 44 percent to 38.88 percent), but that finance companies did not see a sizeable increase in usage. However, if finance company usage is roughly flat or gaining slowly while bank and overall usage is falling, then finance company market share is increasing, at least for all types of credit as a group.

The overall decline in the use of financing sources could reflect changes in the business cycle or in the general availability of small business credit. (For example, the use of mortgages dropped precipitously from 1987 to 1993 due in large part to the real estate financing crunch of the early 1990s, but then bounced back by 1998.) Between 1987 and 1998, there were significant overall drops in the use of mortgages, equipment loans, and motor vehicle loans. At the same time, there were significant increases in the use of lines of credit and capital leases.

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<sup>&</sup>lt;sup>5</sup> Other detailed sources of financing were studied, but changes in disaggregation prevent comparison over time.

**Table 4. Incidence of Small Businesses Using Lender Types**Percent of small businesses using lender for each type of credit

	Lender Type	% of sr	% of small firms using		
Type of Credit		1987	1993	1998	% of firms using
Credit Lines Used	Banks	19.50%	20.60%	24.70%	5.20%
	Thrifts	1.60%	2.10%	1.15%	-0.45%
	Finance Companies	0.70%	1.10%	1.64%	0.94%
	All Sources	21.40%	24.00%	27.71%	6.31%
Mortgage Loans	Banks	9.90%	3.90%	8.82%	-1.08%
	Thrifts	2.20%	1.00%	1.42%	-0.78%
	Finance Companies	0.50%	0.20%	0.58%	0.08%
	All Sources	15.50%	5.80%	13.29%	-2.21%
Equipment Loans	Banks	7.90%	7.50%	5.36%	-2.54%
	Thrifts	0.50%	0.60%	5.50%	5.00%
	Finance Companies	1.60%	2.00%	2.14%	0.54%
	All Sources	12.80%	13.90%	10.18%	-2.62%
Motor Vehicle Loans	Banks	14.00%	13.10%	11.30%	-2.70%
	Thrifts	1.80%	2.40%	2.07%	0.27%
	Finance Companies	8.60%	7.80%	7.91%	-0.69%
	All Sources	24.40%	24.10%	20.55%	-3.85%
Capital Leases	Banks	1.70%	1.70%	2.40%	0.70%
	Thrifts	0.10%	0.20%	0.25%	0.15%
	Finance Companies	1.20%	1.90%	2.30%	1.10%
	All Sources	7.20%	9.10%	10.59%	3.39%
Other Loans	Banks	6.70%	4.20%	4.22%	-2.48%
	Thrifts	1.10%	0.50%	0.24%	-0.86%
	Finance Companies	0.40%	0.20%	0.37%	-0.03%
	All Sources	14.10%	11.00%	9.92%	-4.18%
ALL CREDIT TYPES	Banks	44.00%	36.80%	38.88%	-5.12%
	Thrifts	6.10%	6.10%	4.87%	-1.23%
	Finance Companies	12.00%	11.60%	12.62%	0.62%
	All Sources	60.10%	54.10%	55.09%	-5.01%

Note: Figures do not sum because firms may use more than one type of source and/or more than one credit type.

Source: Cole and Wolken (1996) and Bitler et al. (2001)

While they have made some gains in market share, in general finance companies remain relatively modest providers of credit to small firms, except for motor vehicles, leases and, to a lesser extent, equipment loans. They did gain users for most credit types, but these gains never accounted for more than 1.1 percent of small firms over the 1987-1998 period.

Commercial banks did see declines in usage for mortgages, equipment loans, and motor vehicle loans, but saw a substantial gain in usage for lines of credit, from 19.5 percent to 24.7 percent. Thrifts generally lost ground from an already weak position in the small business market. However, they saw a very large gain in the market for equipment loans, going from a utilization rate of 0.6 percent to 5.5 percent from 1993 to 1998. This may be due in part to changes in regulation in 1996 that allowed thrifts to increase their commercial lending.

## A. Credit Card Usage

There have been a variety of media and trade reports on the increasing use of credit cards for financing small businesses. PSI Global, a market research firm, claims the use of business credit cards increased from 34 percent to 49 percent of small businesses from 1995 to 1999 (SRI International, 2000). Certainly, securitization and credit scoring have generally led to an increase in the offerings of both personal and business credit cards in recent decades. The level of growth in usage, however, appears to be more moderate than suggested by some of these reports.

According to research on the Federal Reserve's National Survey of Small Business Finances (NSSBF), the use of personal and business credit cards by small businesses increased significantly from 1993 to 1998 (Bitler et al., 2001). Personal card usage increased from 40.7 percent to 45.2 percent while business card usage increased from 28.8 percent to 33.3 percent. While these increases are significant, some of them may be related to business cycle effects and increased demand for credit overall. Generally, small business lines of credit (the product most comparable to a credit card used for financing) increased from 1993 to 1998 (from 24.0 percent to 27.7 percent) at roughly the same rate of increase (10 to 15 percent) as did credit cards. At the same time, usage of trade credit declined somewhat, from 63.8 percent to 60.3 percent, over the same period.

An analysis of the 1993 NSSBF data shows that over 75 percent of small businesses using credit cards reported that the amount of business charges remaining at the end of a month was typically zero (Federal Reserve, 1997). So only about 25 percent of credit card users – mostly the smallest firms – used credit cards to obtain credit. Firms with less than 10 employees are also more likely to use personal rather than business cards, while firms larger than this are more likely to use business credit cards. A 1998 survey by Arthur Andersen and National Small Business United indicated that the proportion of small and medium sized firms who pay off their balances each month dropped by almost half from 1997 to 1998, from 57 percent to 38 percent (SRI International, 2000). If these figures are true, the use of credit cards for business financing (as opposed to merely convenience use) has increased fairly dramatically in recent years.

## B. Finance Companies, Credit Cards, and Minority-Owned Firms

While finance companies may not have gained substantial market share from banks overall, there is some evidence that banks may have lost market share among minority-owned businesses. This would be consistent with discussion earlier about bank branch declines in lower-income areas and about the possible disparate impacts of consolidation on minority-owned firms and communities.

Cole and Wolken (1996) find a rather large shift in market share of loans to small minority-owned firms from banks to other lenders. In 1987, 66.4 percent of such loans were made by banks, but by 1993 that share had dropped to 53 percent. Moreover, the proportion of black-owned firms using nondepository financial firms (for credit or other financial services) increased from 17.1 percent in 1993 to 28.7 percent by 1998 (Cole and Wolken, 1995; Bitler et al., 2001). While this increase in utilization is likely to be partly explained by the expanding economy, the growth was significantly faster than the increase in overall bank utilization by black-owned firms, which rose from 77.9 percent to 85.4 percent.

In terms of credit card use, business card use by black-owned firms has not increased as fast as among white-owned firms. Black firms increased usage from 27.9 percent to 28.8 percent, while white firms increased usage from 28.0 percent to 34.0 percent (Cole and Wolken, 1995; Bitler et al., 2001). Conversely, black-owned firms increased usage faster for personal credit cards (from 34.3 percent to 44.1 percent for black firms versus 39.6 percent to 44.9 percent for white firms). Since personal cards are often priced at significantly higher rates than business cards, this trend gives some cause for concern.

### IX. IMPLICATIONS FOR RESEARCH AND POLICY

Many of the developments in financial services and banking pose a significant risk to the ability of small firms in central cities and modest-income suburban communities to access affordable credit. Some changes may actually improve the prospects of some firms in such areas – especially those with strong credit and relatively simple, modest credit needs. These changes and their likely impacts have a variety of implications for research and policy. In terms of research, there are a number of areas worth pursuing:

- More direct data are needed on the impacts of mergers and acquisitions on bank lending to central cities and modest-income suburbs. Also, qualitative information on how mergers affect the lending behavior of banks in such areas would be useful.
- Additional research is needed on whether and how banks especially larger banks with relatively few branches in lower-income and minority areas can do more small business lending in lower-income areas. Particular attention should be on traditional, relationship lending, rather than credit-scored lending. Alternative delivery systems should be explored, including loan production offices, roving loan officers (where staff do a high level of calling on firms in target areas), etc.
- More research is needed on the impacts of credit scoring on minority-owned firms and firms in lower-income areas. Qualitative research on lenders that have used credit scoring and related technologies to effectively reach more firms in such market segments would be extremely useful.
- A clearer understanding of the potential benefits, costs, and risks of more robust securitization activity in small business lending is needed. While securitization has clearly yielded benefits in the mortgage markets, it has also facilitated the funding of some less savory lending practices, particularly in the subprime market. The impact of risk-based pricing, or higher-cost pricing, that might result from increased securitization should be explored.

Changes in small business lending have implications for a variety of public policies. We break the most important into two general areas: implications for bank regulation and implications for community economic development policy.

## A. Implications for Banking and Financial Services Regulation

Changes in banking and small business lending in lower-income market segments have a number of implications for bank regulation.

# 1. CRA regulations and examinations should give more consideration to the location of small business lending.

The strong disparities in growth in small business lending between higher- and lower-income areas in the late 1990s suggests that the gains in CRA home mortgage lending are not being replicated in the small business arena. This may be partly due to the CRA examination process, which in general appears to give relatively little weight to the location of small business loans. Of course, strengthening overall CRA enforcement, including reducing the very high proportion of banks receiving Satisfactory and Outstanding ratings would provide a stronger incentive for banks to be more attentive to lower-income communities generally.

CRA has the potential to be a powerful policy tool for increasing small business lending in central cities and modest-income suburbs. There is some evidence that CRA may be dampening what would be even stronger declines in small business lending in low- and moderate-income areas. The negative effect of mergers on lending in lower-income areas appears to be occurring outside of bank assessment areas, rather than within them. This suggests that CRA may be having a positive effect on lending in some places.

# 2. The delineation of CRA assessment areas should be more closely examined and generally be required to cover entire metropolitan areas, including central cities and modest-income suburbs.

Currently, CRA assessment areas are delineated in ways that impede the law's potential impact. Areas are determined by banks and not regulators; while regulators can challenge delineations that they feel arbitrarily exclude lower-income areas, examples of such action are rare. Moreover, assessment areas continue to be based primarily on the location of bank branches. Since bank branches are increasingly skewed away from lower-income and central city areas, banks are able to justify assessment areas that avoid lower-income areas because they have few or no branches in such places. ssessment areas should include all areas in which a bank has a significant share of the small business lending market.

Assessment areas should comprise one or more MSAs or counties, especially for lenders making significant numbers of loans. This will limit the ability of lenders to "gerrymander" around lower-income areas. On a related matter, many large business credit card banks are currently exempt from any examination of their small business lending practices due to their ability to obtain "limited-purpose" bank status. Any large issuer of small business credit cards should be classified as a retail bank for CRA purposes and be evaluated under the CRA lending test in all market areas where they make significant numbers of credit card loans.

## 3. CRA reporting requirements should be expanded and data should be made fully accessible to the public.

Another limitation of current CRA regulations is that they do not provide for detailed data on small business lending patterns. Public data are not nearly as disaggregated or as comprehensive as Home Mortgage Disclosure Act data. It is impossible to identify detailed lending patterns of particular institutions with the data disclosed to the public. CRA regulations should be revised to provide the public with full access to the data submitted to regulators. Banks and thrifts should be required to report data on each loan application, including the race and gender of business owner. The first step in this direction would be for the Federal Reserve Board to finally adopt its proposed recommendation to modify Regulation B, which currently prohibits even the voluntary collection of such data by lenders.

# 4. The location of bank branches – and any changes to branches – should receive more consideration in federal regulators' evaluation of bank mergers.

The decline in branches in lower-income neighborhoods resulting from mergers and acquisitions has worsened the relative position of firms in these areas in the credit market. This is especially true for firms requiring traditional, relationship-based loans, including firms that do not meet the automatic approval thresholds of credit-scoring lenders or who need larger loans. In addition to the provision of retail financial services, the impact of any proposed decline in branches – especially in lower-income areas – on small business lending should be considered. Moreover, regulators should recognize that de novo institutions that may arise during or after a merger are unlikely to compensate for decline in small business lending of the merged institutions, especially in lower-income areas.

Under CRA, community members can comment on concerns over mergers and can challenge mergers that appear to have deleterious effects on their community. Community development advocates should monitor the implications of proposed mergers for branch locations closely and comment appropriately during the merger application process.

# 5. Regulators should continue to monitor the use and impacts of credit scoring technologies on fair lending and community reinvestment.

As the use of credit scoring for small business lending increases, regulators need to pay close attention to its effect on low income borrowers. Particular attention should be paid to the impacts on borrowers with little or no credit history. In conducting CRA examinations, regulators should look beyond aggregate lending data to identify the type of lending being done. Currently, examiners appear to give considerable credit to lenders making a large number of small loans. While access to small loans is important, especially to very small firms, it is important to distinguish between small loans made primarily by automated means versus those involving relationships and human review.

# 6. CRA implementation and enforcement in the area of small business lending should be expanded and improved.

Finally, the modest but significant gains in market share by finance companies and nonbank lenders provide some cause for concern. The gains signal that CRA-regulated lenders are not maintaining their presence in some segments of the small business lending market, suggesting again that CRA implementation and enforcement in the small business arena should be improved. They also confirm the need to expand CRA to nonbank financial institutions, including finance companies.

### B. Implications for Community Economic Development Policy

The findings of this report also carry implications for community and economic development policy and practice. As banks continue to merge, there is likely to be a continuing and increasing need for community development financial institutions (CDFIs), public-sector credit enhancement programs, and other initiatives that focus significant resources on lending to firms in lower-income areas and minority-owned firms. More resources may need to be targeted toward lower-income and minority market segments. In many cases, there will be a need for institutions that focus on the most neglected segments of the market. While bank activity in these markets should continue to be encouraged through CRA and other means, alternative financial vehicles should also be supported.

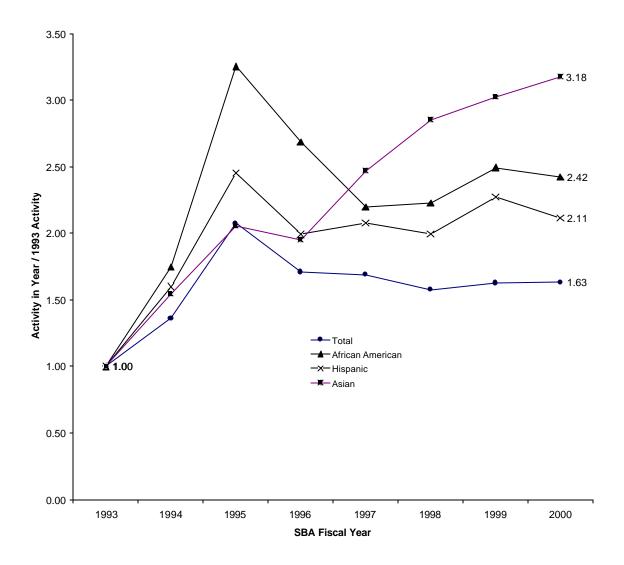
On example of small business financing programs that have some effect on central cities and modest-income suburbs are those of the U.S. Small Business Administration. Some research on lending patterns in the early to mid-1990s showed that both of the SBA's two major loan programs, the 7(a) guarantee and the 504 development company programs, appeared to favor higher- versus lower-income zip code areas (Immergluck, 1995, Immergluck and Mullen, 1998b). However, beginning in 1994, the SBA made major gains in lending to minority-owned firms, as shown in Figure 8. Lending in the 7(a) program to minority-owned firms increased from about 4,200 to over 11,200 loans from fiscal year 1993 to 2000. Lending to minority-owned firms grew at more than two-and-one-half times the overall rate. At the same time, rates of growth were somewhat slower for African-American and Hispanic firms – the firms most likely to be located in central cities – than for Asian firms, which accounted for 53 percent of the gain in minority 7(a) lending. Moreover, partly in response to data showing poor service to lower-income areas, the agency has recently initiated some programs to increase lending to such places, including the development of its Community Express Program, which is designed to offer improved access and some enhancements to the 7(a) product for firms in lower-income areas.

The continuing trend of large banks to become more aggressive in the use of credit scoring technology to market, approve and monitor loans has major implications for small business finance initiatives. For example, it may make sense for some CDFIs and government programs to shift their focus somewhat away from doing only smaller loans, which are being increasingly targeted by large banks – at least in the case of firms with stronger credit. They may want to consider a combination of smaller loans that do not meet the requirements of the new, more aggressive credit-scoring

lenders as well as larger loans that relationship-lending banks are not making for a variety of reasons.

Changes in the financial services industry show no sign of slowing in the foreseeable future. Small businesses in central-city and modest-income suburban communities are likely to face more than their fair share of the difficulties caused by these changes. While some firms in these areas may benefit from some advances in technology, others will find themselves of less interest to many financial institutions. Bank regulators, economic development officials, and community development practitioners should all be aware of the implications of these changes and their potential impact on the most vulnerable communities.

Figure 8. Change in Number of U.S. SBA 7 (A) Guaranteed Loans 1993 - 2000



### **WORKS CITED**

- Allen, James. 1995. "A Promise of Approval in Minutes, Not Hours." American Banker, February 28, p.23.
- Avery, Robert B., Raphael W. Bostic, Paul S. Calem, and Glenn B. Canner. 1999. "Consolidation and Bank Branching Patterns." Journal of Banking and Finance 23: 497-532.
- Avery, Robert B., Raphael W. Bostic, Paul S. Calem, and Glenn B. Canner.. 1997. "Changes in the Distribution of Banking Offices," *Federal Reserve Bulletin* 83:9: 708-725.
- Bates, Timothy. 1993. Banking on Black Enterprise: The Potential of Emerging Firms for Revitalizing Urban Economies. Washington, D.C.: Joint Center for Political and Economic Studies.
- Berger, Allen N., Seth D. Bonime, Lawrence G. Goldberg, and Lawrence J. White. 2000. "The Dynamics of Market Entry: The Effects of Mergers and Acquisitions on De Novo Entry and Small Business Lending in the Banking Industry." Federal Reserve Board of Governors Working Paper. January.
- Berger, Allen N., Anthony Saunders, Joseph Scalise, and Gregory Udell. 1998. "The Effects of Bank Mergers and Acquisitions on Small Business Lending." Journal of Financial Economics 50: 187-229.
- Bitler, Marianne P., Alicia M. Robb, and John D. Wolken. 2001. "Financial Services Used by Small Businesses: Evidence from the 1998 Survey of Small Business Finances." *Federal Reserve Bulletin*, April: 183-205.
- Blanchflower, Daniel, Philip Levine, and David Zimmerman. 1998. "Discrimination in the Small Business Credit Market," Working Paper, National Bureau of Economic Research.
- Bostic, Raphael and Patrick Lampani. 1999. "Race, Geography, Risk and Market Structure: Examining Discrimination in Small Business Finance" *Business Access to Capital and Credit*, Federal Reserve System Research Conference Proceeding, March 8-9, pp. 149-179.
- Bushaw, Amy. 1998. "Small Business Loan Pools: Testing the Waters" *Journal of Small and Emerging Business Law* 2(1), Internet version.
- Campen, James T. 1993. "Banks, Communities and Public Policy," in *Transforming the U.S. Financial System: Equity and Efficiency for the 21<sup>st</sup> Century*, eds. G. Dymski, G. Epstein, and R. Pollin. Armonk, NY: M.E. Sharpe, pp. 221-249.

- Canner, Glenn B. 1999. "Evaluation of CRA Data on Small Business Lending," *Business Access to Capital and Credit,* Federal Reserve System Research Conference Proceeding, March 8-9, pp. 53-84.
- Cavalluzzo, K., L. Cavalluzzo, J. Wolken. 1999. Competition, Small Business Financing and Discrimination: Evidence from a New Survey. *Business Access to Capital and Credit,* Federal Reserve System Research Conference Proceeding, March 8-9, pp. 180-266.
- Cole, Rebel A. 1998. "The Importance of Relationships to the Availability of Credit." *Journal of Banking and Finance* 22: 959-977.
- Cole, Rebel A. and Lawrence G. Goldberg and Lawrence J. White. 1999. "Cookie-Cutter vs. Character: The Micro-Structure of Small Business Lending by Large and Small Banks." *Business Access to Capital and Credit,* Federal Reserve System Research Conference Proceeding, March 8-9, pp.362-389.
- Cole, Rebel and John D. Wolken. 1996. "Bank and Nonbank Competition for Small Business Credit: Evidence from the 1987 and 1993 National Surveys of Small Business Finances." Federal Reserve Bulletin, November: 983-995.
- Cole, Rebel and John D. Wolken . 1995. "Financial Services Used by Small Businesses: Evidence from the 1993 National Survey of Small Business Finances" *Federal Reserve Bulletin*, July: 629-667.
- DeYoung, Robert, Lawrence G. Goldberg, and Lawrence J. White. 1999. "Youth, Adolescence, and Maturity of Banks: Credit Availability to Small Business in an Era of Banking Consolidation." *Journal of Banking and Finance* 23: 463-492.
- Dymski, Gary A. 1999. The Bank Merger Wave: The Economic Causes and Social Consequences of Financial Consolidation. Armonk, NY: M.E. Sharpe.
- Eisenbeis, Robert A. 2000. "Credit Scoring and Lending to Small Business" Outline of presentation at U.S. Small Business Administration Conference on The Changing Banking Structure and Its Impact on Small Business. June 15.
- Feldman, Ron. 1997. "Credit Scoring and Small Business Loans." *Community Dividend.* Federal Reserve Bank of Minneapolis. Spring: 3-9.
- Federal Reserve Bank of Chicago, 1998a. 1996 CRA A Small Business Lending Profile. March.
- Federal Reserve Bank of Chicago, 1998b. 1997 CRA A Small Business Lending Profile. December.
- Federal Reserve Bank of Chicago, 1999. 1998 CRA A Small Business Lending Profile. October.

- Federal Reserve Bank of Chicago, 2000. 1999 CRA A Small Business Lending Profile. November.
- Federal Reserve System and the Securities and Exchange Commission. 2000. Report to the Congress on Markets or Small-Business and Commercial-Mortgage-Related Securities.
- Federal Reserve System. 1997. Report to the Congress on the Availability of Credit to Small Businesses.
- Frame, W. Scott, Michael Padhi, and Lynn Woosley. 2001a. "The Effect of Credit Scoring on Small Business Lending in Low- and Moderate-Income Areas." Federal Reserve Bank of Atlanta. Working Paper 2001-6. April.
- Frame, W. Scott, Aruna Srinivasan, and Lynn Woosley. 2001b. "The Effect of Credit Scoring on Small Business Lending." Journal of Money, Credit, and Banking, forthcoming.
- Immergluck, Daniel. 2001. "Redlining Redux: Black Neighborhoods, Black-owned Firms, and the Regulatory Cold Shoulder." Unpublished manuscript. Woodstock Institute.
- Immergluck, Daniel and Marti Wiles. 2000. Where Banks Do Business: Small Business Lending Patterns in the Chicago Area, 1996 to 1998. Chicago: Woodstock Institute.
- Immergluck, Daniel and Erin Mullen. 1998a. *Getting Down to Business: Assessing Chicago Banks' Small Business Lending in Lower-Income Neighborhoods*. Chicago: Woodstock Institute.
- Immergluck, Daniel and Erin Mullen. 1998b. "The Intrametropolitan Distribution of Economic Development Financing: An Analysis of SBA 504 Lending Patterns." *Economic Development Quarterly* 12: 372-384.
- Lockafeer, Florence and David Rosen. 1996. "Credit Scoring Small Business Loans: Capital Access or Bias?" David Paul Rosen & Associates: Oakland, CA.
- Mester, Loretta J. 1999. "What's the Point of Credit Scoring" *Federal Reserve of Philadelphia Business Review.* January/February: 3-16.
- Mester, Loretta J. 1997. "Banking Industry Consolidation: What's a Small Business to Do?" Federal Reserve of Philadelphia Small Business Review. September/October: 3-16.
- Nakamura, Leonard. 1994. "Small Borrowers and the Survival of the Small Bank: Is Mouse Bank Mighty or Mickey?" Federal Reserve of Philadelphia Small Business Review November/December: 3-15.

- Peek, Joe and Eric S. Rosengren. 1998. "Bank Consolidation and Small Business Lending: It's Not Just Bank Size That Matters." *Journal of Banking & Finance*. 22: 799-819.
- Petersen, Mitchell A. and Raghuram G. Rajan. 2000. "Does Distance Still Matter? The Information Revolution in Small Business Lending" The Changing Financial Industry Structure and Regulation: Bridging States, Countries, and Industries, Proceedings of the 36th Annual Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago: 103-107.
- Pollard, J.S. 1996. "Banking at the Margins: A Geography of Financial Exclusion in Los Angeles." Environment and Planning A 28: 1,209-1,232.
- Rhoades, Stephen A. 2000. "Bank Mergers and Banking Structure in the United States, 1980-1998." Board of Governors of the Federal Reserve System Staff Study 174.
- Squires, Gregory D. and Sally O'Connor. 1999. "Access to Capital: Milwaukee's Continuing Small Business Lending Gaps." University of Wisconsin-Milwaukee.
- SRI International. 2000. *Changing Financial Markets: Implications for Small Business Financing*. A Report for the Ford Foundation. February.
- Strahan, Philip E. and James P. Weston. 1998. "Small business Lending and the Changing Structure of the Banking Industry" Journal of Banking and Finance 22: 821-845.
- White, Lawrence J. 2000. "De Novo Banks and Small Business Lending: What Do We Know? What Should We Know?" from U.S. Small Business Administration Conference on the Changing Banking Structure and Its Impact on Small Business. June 15.
- Yago, Glenn and Aaron Pankratz. 2000. *The Minority Business Challenge: Democratizing Capital for Emerging Domestic Markets*. Milken Institute, September 25.
- Zhang, Zhongcai and Ziona Austrian. 1996. "Small Business Lending: Barriers and Trends." Report for the United States Environmental Protection Agency Office of Pollution Prevention and Toxics. Cleveland State University.