Small business lending by commercial banks in Colorado, 1994 to 1996

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Introduction

Strong and vibrant small businesses are a key to a healthy economy. Small businesses respond well to customer needs and allow an economy to adapt easily to changing circumstance. In addition, small businesses provide a major portion of employment in the U.S. economy: in 1994, businesses with fewer than 100 employees provided 55 percent of all jobs in the nation.[1] Of course, some states are more dependent on small businesses than others. In Colorado, for example, the 1994 share of small business jobs was 59.5 percent. Small business is also important for job creation. Between 1992 and 1996, businesses with fewer than 100 employees created 65 percent of new jobs in Colorado.[2]

Small businesses traditionally depend on commercial banks for financing. Estimates show that as recently as 1993, commercial banks provided 61.3 percent of the volume of small business credit.[3] Moreover, given the strong growth of business lending by commercial banks since 1993, they continue to be an important source of small business credit today. The dominance of banks in small business finance has endured despite many changes in the financial market. Nonbank sources of finance, for example, are increasingly important to small businesses. Moreover, the production of small business has been shifting away from manufacturing and towards services, which suggests a corresponding change in their need for finance. Banks have adapted to these changes by developing alternatives to the traditional bank loan to small business, such as credit cards, leases, and the use of home mortgages and consumer loans by small business owners.

Because small businesses remain heavily reliant on bank finance, any change in banking could have a significant impact on their access to credit. A recent, fundamental transformation has been a shift in the location of the headquarters of banking organizations. With relaxation of interstate banking and branching, most states are finding that a growing portion of local banking assets are controlled by organizations headquartered in other states. Many observers fear that interstate banking may restrict the amount of credit available to small business because out-of-state organizations may not be sufficiently responsive to local small business borrowers. On the other hand, if lending to small business is profitable regardless of the location of a bank's headquarters, then these changes may have limited impact. This uncertainty suggests that it is important to carefully study the record of commercial bank lending to small business.

Recent studies confirm that it is difficult to make generalizations about the impact of consolidation on small business lending.[4] Results are mixed on whether lending to small business will increase or decrease as a result of

[1] Jason Henderson, "How Important Are Small Businesses in the Tenth District?" Federal Reserve Bank of Kansas City ***Regional Economic Digest*** *8 (Third Quarter 1997): 9-12.*
[2] Office of Advocacy, "Small Business: Backbone of the Colorado Economy." Small Business Administration, Internet Web Page www.sba.gov/advo/stats/profiles/97co.html, December 1997.
[3] Rebel Cole, John D. Wolken, and R. Louis Woodburn, "Bank and Nonbank Competition for Small Business Credit: Evidence from the 1987 and 1993 National Surveys of

*Small Business Finance," **Federal Reserve Bulletin**, 82 (November 1996): 983-95. By contrast, over the last 40 years, large businesses have had access to a greater variety of sources of finance, which has reduced their need to borrow from commercial banks.*

[4] *A discussion of research on small business lending is given in Box 1 on page 20.*

[5] *Alan Berger, Anthony Saunders, Joseph Scalise, and Gregory Udell, "The Effects of Bank Mergers and Acquisitions on Small Business Lending," Federal Reserve Board, Finance and Economics Discussion Series working paper number 1997-28 (May 1997), p. 30.*

bank mergers. Differences between in-state and out-of-state institutions have also been examined and the results are again mixed.

Different short- and long-term effects of consolidation may cause the ambiguity. Large banks typically hold a smaller portion of their assets in small business loans, in part because they have lending opportunities unavailable to small banks. Moreover, when a banking organization enters a new market, it may refrain from immediately expanding its loan portfolio as it gathers information about local markets and borrowers. Thus in the short term, acquisition of banks by large, out-of-state banking organizations may lead to less credit available to small businesses.

But in the longer run, forces come into play that mitigate the short-run effects. Out-of-state entrants may bring a different focus and new approaches to small business lending, which could expand small business credit given sufficient time to implement. In addition there may be a response by competitors, who often redouble their efforts to develop their small business lending. Evidence suggests that the long-run effects generally result in an increase in small business lending, and the increase is sufficient to offset the negative short-run effect.[5]

This article examines small business lending in Colorado. What banks have been primary lenders to small businesses? How has the source of loans to small businesses changed in recent years? Has bank consolidation helped or hindered access to credit by small business?

The Colorado banking market is a good case study because it has already undergone significant changes to its banking structure, and so the impact of bank consolidation on small business lending should be readily apparent. In addition, the Colorado experience may portend the future of small business lending in other areas as bank consolidation spreads. While our focus is on traditional lending by banks, in recent years small businesses have experienced a number of changes in the way they obtain finance. This article consequently discusses the growth of loans to small business by nonbank financial intermediaries, as well as the emergence of bank-provided finance through credit cards and leasing programs.

Consolidation of the banking industry in Colorado

The previous article illustrates the magnitude of structural change to the banking industry of the Tenth District. Colorado is undergoing one of the most rapid transformations, involving extensive entry of interstate banking organizations. This entry is a fairly recent occurrence, prompted by the adoption of interstate entry laws. Colorado first allowed entry on a regional basis in 1988, and expanded to nationwide entry in 1991. These same factors are leading to similar changes in banking markets of other states. Colorado's experience is therefore important in understanding how continued consolidation will affect small business finance.

Colorado banking is also consolidating due to an easing of intrastate branching laws. Colorado gradually phased in statewide branching between 1991 and 1997, and out-of-state organizations have made extensive use of this branching authority in consolidating their Colorado banks. The number of bank charters held by these organizations fell from 73 in 1994 to 27 in 1996, while the number of banking

organizations increased from 16 to 17 (see Table 1; a banking organization is defined as either a bank holding company or an independent bank).[6] One major interstate ownership change occurred when Wells Fargo acquired First Interstate in April of 1996. Both were headquartered out of Colorado, so the split between in- and out-of-state organizations was unaffected. By contrast, in-state bank charters only fell from 200 to 186, with most of the reduction occurring in mid-sized banking organizations ($300 million to $1 billion in assets), where the number of bank charters fell from 19 to 9.

Table 1

Structure of Colorado banking
1994 and 1996*

Type of banking organization		June 1994		June 1996			
						Assets	
Headquarters	Size**	Number of banking organizations	Number of banks	Number of banking organizations	Number of banks	$ millions	Percent of all banks
In-state	Small	136	159	138	156	8,459	24.4
	Medium	4	19	4	9	1,702	4.9
	Large	1	22	1	21	2,638	7.6
	All in-state	141	200	143	186	12,799	36.8
Out-of-state	Small	9	18	10	12	956	2.8
	Medium	2	7	2	7	1,426	4.1
	Large	5	48	5	8	19,552	56.3
	All out-of-state	16	73	17	27	21,935	63.2
All banks		157	273	160	213	34,733	100.0

*This table excludes a few Colorado banks because we omitted some specialty banks who do not make business loans, and because of problems such as missing data. The banks in this table form the sample upon which Tables 2 through 5 and Chart 1 are based.

** Based on Colorado assets in June 1996. Small: assets under $200 million; medium: assets $300 million to $1` billion; large: assets over $1 billion.

Colorado now exemplifies a state dominated by out-of-state banking organizations: in 1996, out-of-state banking organizations had control of 63.2 percent of the state's banking assets. Most of these assets were in large organizations—five out-of-state organizations each had over $1 billion in Colorado banking assets, and together they controlled 56.3 percent of Colorado's banking assets. In contrast, the vast majority of in-state banking organizations, 138 in number for 1996, were under $300 million in assets. But taken together, these small in-state banks are a major force in Colorado banking: in 1996, they controlled 24.4 percent of banking assets.

To summarize, the structure of Colorado banking is now characterized by out-of-state banking organizations that are few in numbers but are generally very large, and many in-state organizations that, on average, are comparatively small. There has been a recent change in the number of banks because large out-of-state organizations have combined separately chartered banks under a single charter. However, the split between in- and out-of-state banking organizations has been relatively stable since 1994. Consequently, we expect the recent record of lending to small businesses by commercial banks to reflect little of the short-term effects and more of the long-term effects of consolidation. Specifically, we expect that some large, out-of-state banking

[6] *In this article we use the terms in-state and out-of-state banking organizations to refer to banking organizations whose headquarters are respectively in or out of Colorado.*

Box 1: Research Studies on Small Business Lending

Many studies have examined the impact that mergers and acquisitions may have on small business lending. One major study predicted a substantial decline in small business lending as a result of consolidation.[1] Other studies generally find that mergers and acquisitions involving small banks increased small business lending.[2] At least one study found no effects of mergers and acquisitions on small business lending.[3] A few studies have looked at in- and out-of-state ownership and small business lending. In his study of small business lending in the 10th Federal Reserve District, William Keeton found that banks owned by out-of-state bank holding companies tended to invest smaller proportions of their funds in small business loans.[4] On the other hand, in a study of three states (Illinois, Kentucky, and Montana), Gary Whalen found that banks owned by out-of-state bank holding companies did as much small business lending as in-state banks.[5]

The problem, as Berger et. al. note, is that there are both short-term static and long-term dynamic effects of consolidation.[6] Their study presents an analysis of over 6,000 bank mergers and acquisitions from the 1970s to the 1990s, involving more than 10,000 banks. In the study the authors measure four effects of mergers and acquisitions on small business lending: static, restructuring, direct, and external. The static effect is simply the result from the banking institutions combining their pre-merger and acquisition assets into a larger institution with a unified balance sheet and competitive position. The static effect would be expected to reduce the amount of small business lending

*1 Allen N. Berger, Anil K Kashyap, and Joseph M. Scalise, "The Transformation of the U.S. Banking Industry: What A Long, Strange Trip It's Been," **Brookings Papers on Economic Activity** 1 (1995): 55-218.*

*2 Joe Peek and Eric S. Rosengren, "Small Business Credit Availability: How Important is Size of Lender?," in **Financial System Design: The Case for Universal Banking**, edited by Anthony Saunders and Walter Ingo (Burr Ridge, IL, Irwin Publishing, 1996); Joe Peek and Eric S. Rosengren, "Bank Consolidation and Small Business Lending: It's Not Just Bank Size That Matters," Federal Reserve Bank of Boston working paper (January 1997); Philip E. Strahan and James Weston, "Small Business Lending and Bank Consolidation: Is There Cause for Concern?" Federal Reserve Bank of New York **Current Issues in Economics and Finance**, March 1996; Philip E Strahan and James Weston, "Small Business Lending and the Changing Structure of the Banking Industry," working paper, Federal Reserve Bank of New York, January 1997.*

3 Ben R. Craig and Joao Cabral dos Santos, "Banking Consolidation: Impact on Small Business Lending," working paper, Federal Reserve Bank of Cleveland, February 1997.

*4 William R. Keeton, "Multi-Office Bank Lending to Small Businesses: Some New Evidence," Federal Reserve Bank of Kansas City **Economic Review** 80 (2nd Quarter 1995): 45-57.*

5 Gary Whalen, "Out-of-State Holding Company Affiliation and Small Business Lending ," Office of the Comptroller of the Currency, Economics Department Working Paper number WP95-4 (September 1995).

6 Alan Berger, Anthony Saunders, Joseph Scalise, and Gregory Udell, "The Effects of Bank Mergers and Acquisitions on Small Business Lending," Federal Reserve Board, Finance and Economics Discussion Series working paper number 1997-28 (May 1997), p. 30.

Box 1: Research Studies on Small Business Lending (continued)

since evidence indicates that larger institutions hold proportionally fewer small business loans.

However, the more important effects are dynamic. After the merger or acquisition, it is unlikely that the bank will remain at the combined asset level. For example, a merger that initially results in a $1 billion dollar bank may eventually become a $900 million bank because of a reduction in excess banking capacity and cost reductions. The structuring effect is thus a dynamic effect in which the resulting institution changes its size, financial condition, or competitive position after the merger or acquisition. The restructuring would imply that the resulting institution may hold more small business loans than would result from the simple static effect.

Yet a third effect would be a direct refocusing of attention toward or away from small business lending. The direct effect is measured by the lending characteristics of the resulting $900 million bank. The combination of a $300 million bank and a $700 million bank may result in a $900 million bank, which could be either more like a $300 million bank or more like a $700 million bank.

The fourth and final effect is the response of other lenders to the merger and acquisition. This effect is called the external effect, and is the increase or decrease in small business lending by other banks and nonbanks. The external effect could be important in increasing small business lending over time if valuable business opportunities for other nearby banks occur when consolidating institutions drop some small business loans. For example, if small business borrowers prefer to work with bankers with whom they are familiar, small business loans may follow employees who leave consolidating banks that downsize and join other nearby banks.

Berger et. al. find that in the case of bank mergers, the big decline in small business lending from the static effect is offset by a small increase in small business lending from the restructuring and direct effects and by a larger increase in small business lending due to the external effect. For acquisitions, the direct and external effects are each strong enough to offset the static effect.

Table 2

Small business lending by size of banking organization
Colorado, 1994 and 1996

Type of banking organization		Value of small business lending ($ millions)		Percentage change
Headquarters	Size*	1994	1996	1994 to 1996
In-state	Small	671	921	37.1
	Medium	133	169	26.3
	Large	49	47	-4.6
	All in-state	854	1,136	33.0
Out-of-state	Small	85	112	31.4
	Medium	93	113	20.9
	Large	825	807	-2.2
	All out-of-state	1,003	1,031	2.8
All banks		1,857	2,167	16.7

* Based on Colorado assets in June 1996. Small: assets under $300 million; medium: assets $300 million to $1 billion; large: assets over $1 billion.

organizations (who have been the major driving force to consolidation) would aggressively pursue small business lending. Consolidation could also induce small banks to increase their small business lending if some consolidating institutions decide to focus on other types of lending.

Commercial bank lending to small business

Recent trends show that in-state banking organizations have increased their small business lending, while the record for out-of-state banking organizations is mixed. Table 2 shows the total value of small business lending by Colorado banking organizations for the years 1994 and 1996.[7] As can be seen, the total value of small business lending by commercial banks increased from $1.857 billion in 1994 to $2.167 billion in 1996.

Small business loans made by out-of-state banking organizations rose by 2.8 percent over the two-year period, from $1.003 billion in 1994 to $1.031 billion in 1996. By contrast, in-state organizations increased their small business lending by 33.0 percent, rising from $.854 billion in 1994 to $1.136 billion in 1996. The different growth rates resulted in a shift in market share: in-state organizations had only a 46.0 percent market share in 1994, but the share increased to 52.4 percent in 1996.

Comparing the two dominant groups of banking organizations confirms the overall trend. From 1994 to 1996, large (assets over $1 billion) out-of-state banking organizations decreased their small business lending by $18 million, from $825 million to $807 million. In the same period, small (assets under $300 million) in-state banking organizations increased their small business lending by $250 million, from $671 million to $921 million.

Banks of differing sizes face different constraints and opportunities, and so it is useful to adjust for size by calculating the ratio of small business loans to total assets (see Table 3). The in-state and out-of-state organizations had considerable differences in the change in these ratios. Out-of-state banking organizations lent 4.58 percent of assets to small businesses in 1994, and the percentage rose slightly to 4.7 percent in 1996. In-state banking organizations increased their small business loans as a percentage of assets, from 8.11 percent in 1994 to 8.88 percent in 1996.

These divergent records are less a matter of the location of the banking organization's headquarters, and more

[7] To adjust for acquisitions that occurred between 1994 and 1996, the acquired bank's assets for 1994 were consolidated into that of the acquiring organizations. The Appendix has additional information on the sources, methods, and limitations of the data that we use in this study.

a matter of different sizes of organizations within the in- and out-of-state groups. Small and medium banking organizations, regardless of the location of their headquarters, appear to have taken similar strategies towards small business lending. Table 2 shows that small and medium in-state organizations increased their lending to small businesses by 37.1 percent and 26.3 percent, respectively, from 1994 to 1996. Small and medium out-of-state organizations increased their lending to small businesses by 31.4 percent and 20.9 percent, respectively, for the same period. These increases are smaller than that for their in-state counterparts but still represent significant growth.

In addition, Table 3 shows that for in- and out-of-state organizations, small business loans as a percentage of assets was very close among small- and medium-size organizations. In fact, the highest ratio, at 11.66 percent for 1996, was recorded by small, out-of-state organizations. It is true that, on the whole, the in-state organizations have become increasingly important as sources of finance to small business. To a considerable extent, however, this is because small and medium banking organizations tend to specialize in small business lending, and most in-state Colorado organizations are in the small and medium categories.

Table 4 details the level of small business lending for the large (over $1 billion) banking organizations. There is only one in-state banking organization in the over-$1-billion-asset category: FirstBank Holding Company of Colorado. Of the six largest banking organizations, FirstBank Holding Company had the lowest ratio of small business loans to assets (1.77 percent in 1996). FirstBank's relatively low portion of assets in small business loans reflects its decision to specialize in retail banking and consumer lending.

Table 3

Small business lending relative to total assets
Colorado banking organizations, 1994 and 1996

Type of banking organization		Small business loans to total assets (percent)	
Headquarters	Size**	1994	1996
In-state	Small	9.62	10.88
	Medium	8.72	9.91
	Large	2.43	1.77
	All in-state	8.11	8.88
Out-of-state	Small	9.57	11.66
	Medium	9.63	7.89
	Large	4.11	4.13
	All out-of-state	4.58	4.70

* Average value, weighted by total assets.

** Based on Colorado assets in June 1996. Small: assets under $300 million; medium: assets $300 million to $1 billion; large: assets over $1 billion.

There are five out-of-state banking organizations in the over-$1-billion-asset category, and for the 1994 to 1996 period, there were declines in small business loans by some of these organizations and increases by others. U.S. Bancorp, for example, has chosen to de-emphasize small business lending in Colorado, and its lending to small businesses declined by 29.32 percent between 1994 and 1996.[8] On the other hand, both Norwest and KeyCorp had large increases (8.66 percent and 36.41 percent, respectively) in small business lending. Like FirstBank Holding Company, these organizations have their own areas of specialization. Box 2 (page 26)

[8] These Colorado banks were part of First Bank System in the period under study. First Bank System acquired U.S. Bancorp and adopted the name in 1997.

Table 4

Small business loans by Colorado banking organizations with assets over $1 billion
1994 and 1996*

Banking organization	Headquarters	1994 Small business loans ($ millions)	1994 Small business loans as a percent of assets**	1996 Small business loans ($ millions)	1996 Small business loans as a percent of assets**	Percentage change of small business loans 1994 to 1996
Norwest Corporation	Minnesota	314.20	4.50	341.40	4.77	8.66
Banc One Corporation	Ohio	177.11	5.03	174.12	5.48	-1.69
U.S. Bancorp***	Minnesota	202.13	2.80	142.87	2.12	-29.32
KeyCorp	Ohio	92.85	11.50	126.65	10.08	36.41
FirstBank Holding Company	Colorado	49.00	2.43	46.72	1.77	-4.65
Wells Fargo and Company****	California	38.71	2.52	22.14	1.79	-42.81

* Size based on Colorado assets as of June 1996. Banking organizations are listed according to the amount of small business loans as of June 1996.
** Average value for Colorado banks in the organization, weighted by total assets.
*** These banks were part of First Bank System in the period under study. First Bank System acquired U.S. Bancorp and adopted the name in 1997.
**** These banks were owned by First Interstate for most of the sample period. Wells Fargo acquired First Interstate in April 1996.

provides more details of individual bank strategies towards small business lending.

Data for Colorado small business lending show that the extent to which an organization commits assets to small business finance is not solely a function of the size or location of the banking organization. Some large in-state lenders focus on markets other than small businesses, while some large out-of-state lenders are significant players in small business finance. Nevertheless, Table 3 shows a systematic relation between the size of an organization and the share of assets it devotes to small business loans.

There are a number of reasons why ratios of small business loans to assets differ among small and large banking organizations. First, large banks have business opportunities unavailable to small banks. Due to their size and capital base, large banks are able to provide services to major corporations and larger businesses. Moreover, state and federal regulations prohibit banks from making unsecured loans to a single customer that would exceed a specified percentage of their total capital.[9] This constraint effectively prohibits small banks from making the large loans that big businesses often require. Second, large banks are able to pursue lines of business that require sufficient volume to be economical. Credit card operations, for example, require large volumes to take advantage of economies of scale. To securitize assets, a bank must be able to package enough loans together to cover underwriting expenses and to market to

[9] *Kenneth Spong, **Banking Regulation**, 4th edition. (Kansas City: Federal Reserve Bank of Kansas City, 1994), p. 63.*

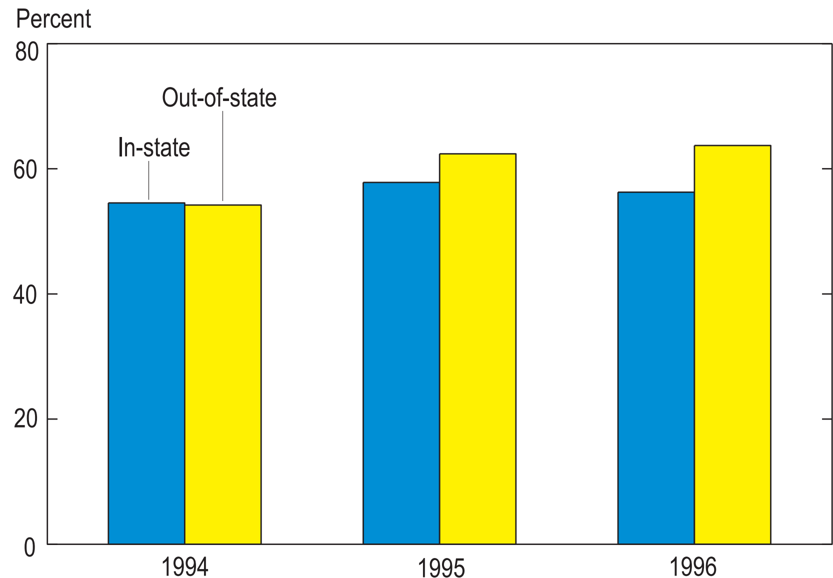
investors. Large corporate loan programs require not only capital but also specialized loan officers that small banks could not support. These and other opportunities mean that, as a general rule, the percentage of assets devoted to small business loans for large banks will be less than that for small banks.

The additional business opportunities available to large banks provide important sources for loan growth. Call report data show that over the 1994 to 1996 period, out-of-state banking organizations significantly increased their Colorado lending in four areas: real estate, consumer lending, large loans for commercial and industrial borrowers, and lease financing. As seen in Chart 1, over the 1994 to 1996 period, out-of-state organizations increased their loan-to-asset ratios, while those for in-state organizations stayed relatively stable. The large, out-of-state banking organizations were thus committing more of their assets to serving the needs of borrowers.[10]

Chart 1

Total loans to total assets: Colorado banking organizations, 1994 - 1996

Total loans as a percent of total assets*



*Average value, weighted by total assets.

Changes in the size distribution of small business loans

Recently, larger banking organizations have changed lending practices and adopted technologies for the smallest loans they make to small business. Bank One, for instance, has a fully automated system for loans up to $35,000, and uses credit scoring in regional centers for loans up to $1 million.[11] Small business credit cards are another innovation at many larger banks. As one example, Advanta Corporation offers credit cards to small businesses with a credit line up to $25,000.[12] These new methods aim to streamline operations and reduce underwriting costs, and because they typically involve automation and centralized processing and servicing of loans, they have been the province of large banks. Recent research on small business lending in western states has revealed rapid growth of under-$100,000 loans at large banks.[13] Investigators have singled out the new underwriting methods to explain this growth. Given this previous research, it is worthwhile to examine the changes in Colorado small business lending by the size of the loan.

Table 5 shows the change in small business loans over the 1994 to 1996 period, by the size of the loan. The data show that the increase in small business lending by smaller in-state organizations occurred with loans of

[10] Spong and Shoenhair noted that banks acquired by out-of-state banking organizations became more active lenders after acquisition; see Ken Spong and John Shoenhair, "Performance of Banks Acquired on an Interstate Basis," Federal Reserve Bank of Kansas City ***Financial Industry Perspectives*** *(December 1992): 15-32.*

[11] About 30 percent of the applications are approved by credit scoring (Robin Wantland, "Best Practices in Small Business Lending for Any Delivery System,"

Box 2: Strategies for the Small Business Lending Market

The nature of small business lending has changed considerably in the last several years, and finding a strategy that leads to a successful lending program has proved to be a challenge for bankers. For some large banking organizations, this has meant de-emphasizing small business lending and pursuing alternative lines of business that are more attuned to their specific goals and resource specialties. For other large banking organizations, profitable lending to small businesses has required different lending methods and new ways of processing loan applications.

Two of the large Colorado banking organizations devote relatively little of their assets to small business loans, which reflects their respective business strategies.[1] FirstBank Holding Company of Colorado, the largest in-state bank holding company, emphasizes retail banking with a more limited focus on commercial lending. It was the first banking organization in Colorado to offer banking locations in grocery stores, serving customers through expanded access to banking locations, including an extensive ATM network. It has been successful with retail banking services such as checking accounts, ATMs, debit cards, mortgages and home equity lines. U.S. Bancorp of Minneapolis (formerly First Bank System) has also pursued banking lines other than small business loans in recent years. Most of its profits have come from retail operations, but its business-banking unit has also been an important contributor towards the bottom line. Rather than make small business loans, however, U.S. Bancorp has chosen to focus on middle market companies.

Other large, out-of-state banking organizations are targeting the small business market. Their approach is different from that of community banks, most of whom have not pursued automation for approving and servicing loans, and, instead, have emphasized personal relationship banking. Larger banking organizations have embraced credit scoring and the use of technology in the delivery of lending services.[2] The extent to which these banks use credit scoring varies. KeyCorp, which is headquartered in Cleveland, was Colorado's fourth largest small business lender in 1996. It uses credit scoring for loans under $50,000 and simplifies the process by using a one-page application, but offers these loans through local branches. KeyCorp views community banks as its prime competitor for small business loans, and so attempts to maintain personal contact with borrowers through an extensive network of small business managers. It has achieved a measure of success with this approach, having been the only large banking organization in Colorado to be recently designated a "small business friendly" bank by the Small Business Administration.

[1] As of June 1996, the ratio of small business loans to assets was 1.77 percent for FirstBank Holding Company of Colorado and 2.12 percent for U.S. Bancorp (see Table 4). By comparison, the ratio for KeyCorp was 10.08 percent, which was the highest among the six largest banking organizations in Colorado.

*[2] A recent survey indicated that 70 percent of banks with assets of $500 million or less had no plans of using credit scoring, 55 percent of banks with assets in excess of $5 billion indicated that they planned on installing credit scoring systems in the next two years. See John Racine, "Community Banks Reject Credit Scoring for the Human Rouch," **American Banker**, May 22, 1995, p.12.*

Box 2: Strategies for the Small Business Lending Market (continued)

By contrast, Wells Fargo has embraced automation for under-$100,000 loans to small businesses. Wells delivers these loans nationally through centralized processing and servicing operations. Products are standardized, and potential customers are solicited on a pre-approved basis. Approval decisions rely heavily on credit scores. These scores are assigned using privately developed software that exploits Wells' small business database. Wells Fargo uses its branches to market small business loans over $100,000. For these loans, Wells does not use credit scores, but instead compares the small businesses' financial position against a benchmark of businesses in similar industries. The process not only assigns a risk rating for the small business, but also suggests banking products appropriate to the business. Wells Fargo is not currently a significant lender to Colorado small businesses in part because its recent entry into the Colorado market was through a bank that had not aggressively pursued small business lending. This will likely change in the near future, as Wells has recently announced plans to open five specialized business banking centers and 50 retail locations through Colorado supermarkets.

Many of the strategies that we are observing in Colorado are similar to those observed nationwide. Larger institutions are using credit scoring and a higher level of technology in the delivery of lending services to small businesses, while smaller community banks have opted for more traditional approaches. The results appear to be driven more by strategy and size than by location of ownership. For Colorado, the level of small business lending by large banks has been relatively stable because a scaling back of lending at some banks has offset expansion of lending at other large banks. Overall, the strategy of smaller banks has enabled them to gain market share during the 1994 to 1996 period. But as the larger banks with a commitment to small business lending continue to develop this business, smaller banks will face an even more competitive market.

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Table 5

Small business loans by size of loan: Colorado banking organizations, 1994 and 1996

Type of banking organization		Loans less than $100,000			Loans $100,000 to $250,000			Loans $250,000 to $1,000,000		
		Value ($ millions)		Percentage change, 1994 to 1996	Value ($ millions)		Percentage change, 1994 to 1996	Value ($ millions)		Percentage change, 1994 to 1996
Headquarters	Size*	1994	1996		1994	1996		1994	1996	
In-state	Small	404	506	25.0	106	165	55.8	161	250	55.2
	Medium	82	63	-22.8	30	38	28.2	22	67	206.5
	Large	26	27	1.2	11	11	7.3	12	9	-27.7
	All in-state	512	595	16.2	147	215	46.6	195	326	67.0
Out-of-state	Small	30	40	36.4	17	17	-.5	38	54	41.8
	Medium	33	48	45.2	18	20	10.8	42	45	6.3
	Large	314	285	-9.3	173	193	11.0	338	330	-2.3
	All out-of-state	377	373	-1.0	208	229	10.0	418	429	2.6
All banks		889	968	8.9	355	444	25.2	613	755	23.1

* Based on Colorado assets in June 1996. Small: assets under $300 million; medium: assets $300 million to $1 billion; Large: assets over $1 billion.

all sizes. It is most surprising to find that, in the under-$100,000 loan category, out-of-state organizations had a decrease of 1 percent while in-state organizations had an increase of 16.2 percent. Large, out-of-state organizations decreased their lending in this category by 9.3 percent, while small, in-state banking organizations had a 25.0 percent increase.

Of the three loan size categories, Table 5 shows that while out-of-state organizations were particularly aggressive in the $100,000-to-$250,000-loan category, most of the increased lending for this category was from in-state organizations. For the $250,000-to-$1,000,000 loan category, in-state lenders were particularly aggressive, with these loans rising by 67 percent.

The recent lending pattern has raised the proportion of small business loans that banks have allocated to the larger loan categories. For example, of the total amount that in-state organizations lent to small businesses in 1994, 23 percent was in the $250,000-to-$1,000,000-loan category, while the figure for 1996 was 29 percent.[14] There was a corresponding decrease in loans allocated to the under-$100,000-loan category by in-state organizations, from 60 percent in 1994 to 52 percent in 1996. In spite of this reallocation, Table 5 shows that, for 1996, in-state organizations remained the primary source for loans under $100,000.

For Colorado banks, then, recent trends in the under-$100,000-loan category of small business loans have not followed that seen in the far western part of the U.S. However, it is

__Journal of Lending and Credit Risk Management__ 78 (December 1996): 16-24. Credit scoring as part of a small business lending strategy is discussed in Side Box 2 on page 26.

12 Sam Zuckerman, "Taking Small Business Competition Nationwide," __US Banker__ 106 (August 1996): 24-28+.

13 Mark Levonian, "Changes in Small Business Lending in the West," Federal Reserve Bank of San Francisco __Weekly Letter__ (January 24, 1997).

14 The in-state organizations lent $.854 billion to small businesses in 1994 (Table 2), and of this,

likely that in-state banking organizations will face stiff competitive pressure as larger banking organizations continue to aggressively market low-cost methods for making business loans under $100,000. This could also change the characteristics of loans at in-state organizations, as borrowers with established credit records migrate towards large banking organizations, thus leaving smaller banks with a pool of borrowers that have less established credit records.[15]

Changes to the small business lending market

Call report data reveal significant changes to small business lending by Colorado banks. At the same time, other elements of the small business lending market have changed. On the supply side of the market, growth of nonbank competitors has been very dramatic. On the demand side of the market, growth of service-oriented firms has reduced the need for some traditional forms of credit. Call report data will not capture these changes, and in this section, we review some new features of small business lending, and consider their broad implications regarding the evolution of bank lending to small business.

While banks still dominate the small business lending market, they lost market share of outstanding loans over the period from 1987 to 1993. A recent study found that, for the U.S. in 1993, banks held 61.3 percent of small business loans, but this was a 2 percent decline from their 1987 share.[16] By contrast, finance companies, brokerage firms and leasing companies increased their nationwide share of small business lending by 6.3 percent. Moreover, the decline in the portion of small businesses that use banks as a source of credit is more dramatic. From 1987 to 1993 the incidence of small businesses using bank credit services declined by 7.2 percent, while that for nonbank institutions remained flat, implying a relative increase in the use of alternatives to banks as sources of finance.[17] Other data also suggest that the growth in nonbank competition is particularly strong in Colorado. For example, reports show Colorado employment in nondepository credit institutions grew at a rate of 11.1 percent in 1996, while employment in banks grew by only 1.6 percent.[18]

Additionally, the Small Business Administration reported that nondepository credit institutions in Colorado were the fastest growing small business category from 1993 to 1994, experiencing a 26.5 percent increase.[19] Rapid growth of nonbank sources of finance suggests that access to small business credit may have increased even more than is indicated by bank lending data. This nonbank competition also affects how we interpret the relative growth of large and small bank lending. Studies have shown that banks in urban locations were subject to greater competition for small business lending than were banks located in rural areas. Urban banks saw their market share of small business lending decline by 3 percent nationwide from 1987 to 1993, while rural banks gained 2.9 percent.[20] This suggests that larger banks, which tend to operate in urban areas, have likely faced greater competition from nonbank providers of finance. As a result, the slower growth of small business lending in the larger, more urban Colorado banks may be related to greater competition and loss in market share to nonbanks.

Another complication is the larger banking organizations that provide

$195 million was in the $250,000-to-$1,000,000-loan category (Table 5), so these banks allocated to this category 23 percent ($195/$854) of their small business loans. Similar calculations lead to the other percentages in this paragraph. For comparison, in the $250,000-to-$1,000,000-loan category, the share in 1994 and in 1996 for out-of-state organizations was 42 percent.

15 Borrowers may have less established credit records, but smaller banks could control credit risk by exploiting information available through close contact between the bank and the borrower.

16 Cole, Wolken, and Woodburn, "Bank and Nonbank Competition for Small Business Credit," p. 991.

17 Cole, Wolken, and Woodburn, "Bank and Nonbank Competition for Small Business Credit," p. 992.

18 Colorado Department of Labor and Employment, "Colorado in 1996," Internet Website Page http://governor.state.co.us/gov_dir/labor_dir/lmi/market_pubs_le.html (February 1998).

19 Office of Advocacy, "Small Business: Backbone of the Colorado Economy," Small Business Administration, Internet Web Page www.sba.gov/advo/stats/profiles/97co.html (December 1997).

20 Cole, Wolken, and Woodburn. "Bank and Nonbank Competition for Small Business Credit," p. 991.

financing through nonbank subsidiaries. Many of the larger banking organizations in Colorado have nonbanking subsidiaries that offer financing to small businesses. One large organization in Colorado estimates that such activity makes up about 5 percent of total small business lending. As a result, call report data will understate the amount of small business lending by large banking organizations.[21]

As indicated earlier in this paper, small business growth has been dramatic both nationwide and in Colorado, which implies a parallel growth in demand for loans. However, a few trends may dampen demand for traditional loans. For example, the largest growth in small businesses has been in the service sector. Between 1992 and 1996, Colorado experienced rapid growth in the service sector, with most of the growth coming from very small businesses. Service firms were the fastest growing category of small businesses for all firms employing fewer than 100 employees, and in the 1-4 employee category, over 82,000 service firms were created.[22] By contrast, the slowest growth in the small business sector was in manufacturing.

With this change in the make up of the small business sector comes a change in the demand for finance. First, service firms typically require smaller amounts of financing than do capital intensive manufacturing firms. Second, service firms will not have extensive inventory with which they could secure a loan, and therefore may use credit secured by accounts receivable or unsecured credit. Indeed, many small business owners are using personal credit card lines and leasing as a substitute for traditional business loans. One study reports that nearly 40 percent of surveyed firms had used personal credit card debt as a substitute source of credit.[23] Another study reports significant growth in the use of credit card debt and leases by small businesses: in 1997, 34 percent of survey respondents indicated that they used credit cards as a source of finance, up from 17 percent four years earlier.[24] Similarly, 16 percent of survey respondents indicated that they used leases as a source of finance, up from 8 percent four years earlier.[25] Since larger banks dominate the market for credit cards and leases, larger banks are likely providing significant amounts of this type of financing to small businesses.

To summarize, the market for small business lending has changed in recent years. Some of these changes, such as lending by nonbank subsidiaries of banking organizations and increasing use of credit cards, would suggest that we have understated the amount of large bank lending to small businesses. Other changes, such as greater nonbank competition for small business finance, and changes in the financing needs of small business, point to added challenges that banks must face to be successful in this market.

Conclusion

The market for small business loans in Colorado has undergone significant change. Our main finding is that, between 1994 and 1996, small business lending by small to medium size banking organizations grew much faster than lending by large organizations. Banks who were part of in-state organizations expanded their share of lending to small businesses from 46.0 percent to 52.4 percent. The increased market share was not necessarily due to their in-state status, but rather due

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21 These changes also mean that we may have misstated the growth of small business lending by large banking organizations, but since the amount of lending by subsidiaries is relatively small, the degree of misstatement is likely to be small.

22 Office of Advocacy, "Small Business: Backbone of the Colorado Economy."

23 Cole, Wolken, and Woodburn. "Bank and Nonbank Competition for Small Business Credit," p. 990.

24 Arthur Andersen Enterprise Group and National Small Business United, ***Survey of Small and Mid-Sized Business - Trends for 1997****. (Chicago IL: Arthur Andersen, 1997), p. 39.*

25 Arthur Andersen Enterprise Group and National Small Business United, ***Survey of Small and Mid-Sized Business - Trends for 1997****, p. 39, and Arthur Andersen Enterprise Group and National Small Business United,* ***Survey of Small and Mid-Sized Business - Trends for 1993.*** *(Chicago IL: Arthur Andersen, 1993), p. 9.*

to the fact that much of small business lending by banks came from small and medium size banks, and in-state banking organizations in Colorado are primarily small and medium size. Small and medium size, out-of-state banking organizations also expanded their market share.

Large banking organizations, both in- and out-of-state, lost market share in small business loans. Yet in 1996 they still provided close to 40 percent of small business loans made by banks, and so were still important providers of credit to small businesses. Moreover, several large banking organizations significantly expanded their small business lending. In addition, out-of-state banking organizations were actively serving borrowers in other markets, such as real estate, consumer lending, large loans for commercial and industrial borrowers, and lease financing.

By 1994 bank consolidation and out-of-state participation in banking were well established in Colorado. As a result, the shifts we observe in small business lending are most likely due to the longer run effects of bank consolidation. The large increase in small business lending by small and medium banking organizations is a particularly striking example of responding to the opportunities created by consolidation. Small business borrowers may have faced some shifts in financing sources, but given the overall increase in loans, it appears that their credit needs were adequately met.

In spite of recent trends, it is uncertain whether small business lending in Colorado will continue to migrate towards small and medium size banks. First, we have not investigated how the business cycle might influence small business lending patterns, and so we cannot say whether the observed trends are unique to this period. Second, some large banking organizations are developing loan products that target small business, and the Colorado market has yet to see the impact of these products. Additionally, we have seen that non-bank providers of small business finance are making inroads to the market. These developments will continue to pose significant challenges to small and medium size banks and others providing finance to Colorado's small businesses.

Appendix: Data Sources, Methods, and Limitations

Data on small business lending used in this article come from the second quarter call reports filed by commercial banks. Beginning in 1993, call reports have had a section for banks to report the number and total value of loans they make with a small original loan amount.[1] This article examines the small commercial and industrial loans reported in this section because such loans provide insight into the small business lending market.[2] Not all of these smaller loans are necessarily made to small businesses. However, other studies have shown that the size of a business is correlated with the size of bank borrowing, and the vast majority of small commercial and industrial loans from call reports are likely made to small businesses.

Data for this study are based on the consolidated banking organization, with the loans and assets for all of the banks in an organization combined together. A handful of banks was acquired during the sample period, and their assets were consolidated into that of the acquiring organizations for 1994 in order to allow for the same combined entity to be followed throughout the period.

Banking organizations were designated as either in- or out-of-state based on the location of their headquarters in June 1996. Thus, an in-state bank that was acquired by an out-of-state organization would be designated as part of an out-of-state organization for the entire sample period.

The small business loan data in call reports may not necessarily reflect all of the activity of an interstate organization for a particular state in which it operates. A loan to a borrower in Colorado may be reported on the books of a bank that is chartered in California, or a loan to a borrower in Wyoming may be reported on the books of a Colorado bank. To the extent that this practice occurs, it would be most important for out-of-state organizations, and so this study may misstate their small business lending activity in Colorado. However, small business loans often require a relatively high degree of monitoring and oversight, which is done most effectively in close proximity to the borrower.

[1] Banks report the total of the original value and the number of loans made in each of three size categories: (1) under $100,000; (2) $100,000 to $250,000; and (3) $250,000 to $1,000,000.
[2] Banks also report small loans for commercial real estate and for agriculture. We do not analyze these data because they are beyond the scope of this project.

Appendix: Data Sources, Methods, and Limitations (continued)

Thus, we would expect to see most small business loans placed on the books of banks close to the borrower.

Although the data were first collected in 1993, the analysis is limited to data for the years 1994 and 1996. Data for 1993 and 1995 are excluded because of data errors. Previous research has shown that banks made significant errors in reporting these items on the 1993 call report, possibly due to ambiguity in the call report instructions. A clerical error caused one banking organization to misreport the small business loan data for 1995. The organization has a large presence in Colorado, and this error meant that overall bank lending to small businesses was understated by approximately 6 percent. The organization was unable to provide the correct data, and rather than use an estimate, we excluded 1995. Finally, data for 1997 are excluded because a number of Colorado banks were converted to branches of out-of-state banks under the new interstate branching authority and these offices no longer file separate call reports.