# Future of Banking Study

Bank Branch Growth Has Been Steady— Will It Continue?

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### **Bank Branch Growth Has Been Steady – Will It Continue?**

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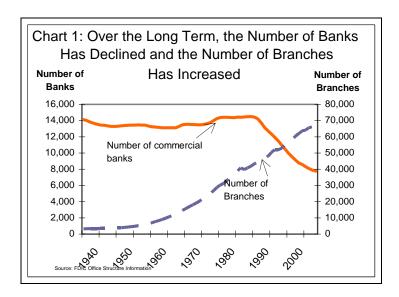
Division of Insurance and Research Federal Deposit Insurance Corporation

The views expressed in this paper are those of the author, and are not necessarily those of the Federal Deposit Insurance Corporation.

#### Bank Branch Growth Has Been Steady – Will It Continue?

#### Introduction

The decline in the number of insured institutions has been widely reported – the number of institution charters has been declining since 1984, and in the decade between 1994 and 2003, dropped almost 29 percent.<sup>1</sup> However, observers seldom note that the number of physical bank *offices* has been steadily increasing, driven by an increase in branches (see Chart 1). In the decade between 1994 and 2003 the number of bank branches increased 15 percent.<sup>2</sup>



The growth in physical branches is all the more striking in that it occurred during a period of rapid technological advances that would appear to have diminished the need to use branches. These advances include a proliferation of automated teller machines, and the rise of the Internet and increasing broadband capacity,

<sup>1</sup> For a more complete discussion of the reasons for charter declines, refer to two papers issued under the *FDIC's Future of Banking* series: "The Declining Number of U.S. Banking Organizations: Will the Trend Continue?" and "Community Banks: Their Recent Past, Current Performance, and Future Prospects." The papers can be found at www.fdic.gov/bank/analytical/future/index.html.

<sup>&</sup>lt;sup>2</sup> The net increase in offices (decrease in main offices plus increase in branch offices) was 8 percent over the decade of June 1994 to June 2003.

which have enabled customers to bank on line. Moreover, legal changes and financial innovations have intensified the competitive landscape by removing many of the traditional barriers between banks and other financial service companies, allowing these companies to offer products and services typically provided through bank offices, again seemingly reducing the need for physical bank branches. However, over time, bank branches have proven to be a highly effective and profitable distribution channel, perhaps very simply because people seem to like the convenience of bank branches. The ability to leverage branch networks to generate business has helped distinguish banks in an extremely competitive financial services marketplace.

This paper investigates and reviews some of the reasons behind branching trends. The steady increase in branching is due primarily to three factors: (1) changes in bank branching laws that led to structural shifts in branching; (2) branching, when well executed, appears to improve performance; and (3) favorable economic and demographic trends encourage branching in certain markets. Additionally, the paper will review some of the more active markets and examine what branching trends may look like going forward.

## Changes to Branch Banking Laws Contributed to the Rise of Multi-branch Institutions and the Overall Increase in Branches

During the past decade, there has been a decline in the number and market share of one-office institutions and an increase in the importance of multi-branch banks (see Table 1). For example, organizations with 51 or more offices increased ownership from 39.3 percent of all offices holding about 47 percent of deposits in 1994, to 52.5 percent of offices holding over 62 percent of deposits by June 2003. On average, the number of physical offices per institution has increased from 6.3 to 9.5 over the last decade. A large part of this increase was due to the process of collapsing multi-state and multi-bank organizations into more efficient structures in response to relaxing of restrictions to branching.

Table 1 - Distribution of Insured Institutions by Number of Offices and Reported Deposits

Number of Offices in BHC or Individual Institution	Insured Institutions (Percent by Charter)		Banking Offices (Percent of Number of Offices		Reported Deposits (Percent of Deposits in each office)	
Number of Offices	1994	2003	1994	2003	1994	2003
1	36.6	28.8	5.9	3.0	6.5	4.8
2-3	32.7	31.0	12.5	7.9	9.3	7.9
4-10	22.3	29.4	20.3	18.0	15.7	11.4
11-50	6.7	8.9	22.0	18.6	21.5	13.9
51 or more	1.7	1.9	39.3	52.5	47.0	62.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Average numbers of offices per institution			6.3	9.5		

Note: Institutions and numbers of offices are allocated based upon the number of branches in the consolidated organization.

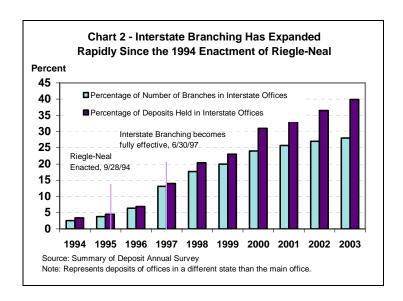
Source: Summary of Deposit Annual Survey

Historically, state restrictions on branching have varied considerably. Many states had laws that limited branching within the state, and some state laws were based upon unit banking, which generally limited banks to a single office. In those states, operating a multi-office banking organization required separate charters for each office leading to the formation of holding companies that owned numerous banks within a state or region. Interstate branching, where possible, was restricted by reciprocal agreements between states and was generally handled through a bank holding company structure using affiliated banking charters in various states.

Legislative easing of these various state branching restrictions began in earnest during the early 1980s with gradual changes to intrastate and interstate branching laws on a state-by-state basis. This piecemeal approach to relaxation of restrictions on branching continued until the 1994 passage of the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 (Riegle-Neal), which removed many remaining individual state law restrictions on interstate branch banking. However, under Riegle-Neal, interstate mergers where the resulting company will own more than 10 percent of the deposits of insured banking companies in the United States are prohibited.

As might be expected, subsequent to the enactment of Riegle-Neal, interstate branching increased rapidly as banks sought to simplify their structure by consolidating multi-state and multi-bank operations into

branches and then began to expand their branch networks under the new, relaxed rules. As shown in Chart 2, Riegle-Neal began a ten-year period that saw a strong upward trend in the number of offices and deposits held in interstate banking organizations.



The effects of the relaxation of intrastate branching restrictions may have largely played out within banking organizations. However, it appears that interstate banking companies will continue to retain and even build market share, as evidenced by recent large mergers and plans announced by several large banking companies to expand their branch networks.<sup>3</sup>

Moreover, factoring in recent mergers, there are still only four banking organizations with bank branches in over 20 states (see Table 2).<sup>4</sup> The U.S. may not have a banking company with a truly national physical branch presence for the foreseeable future, because of the Riegle Neal deposit cap and the fact that it may not be

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<sup>&</sup>lt;sup>3</sup> The recent large mergers are Bank America Corporation's purchase of FleetBoston Financial Corporation J.P.Morgan Chase & Company's announcement to purchase Bank One Corporation, and Regions Financial Corporation's agreement to purchase Union Planters Corporation. An example of large banks expanding their branch networks is Bank of America, which even after the merger, has "begun building hundreds of new branches in addition to our existing 5,700 stores." (See Jim Hance, Vice Chairman, Bank of America, "Remarks at the Federal Reserve Bank of Chicago Conference on Bank Structure and Competitio,." May 7, 2004).

<sup>&</sup>lt;sup>4</sup> This figure does not account for non-depository offices such as loan production offices.

profitable to do so. However, this level of geographic dispersion alone may suggest that there is still considerable incentive for banks to increase their footprint and that the market share of multi-branch banking organizations will likely continue to increase.

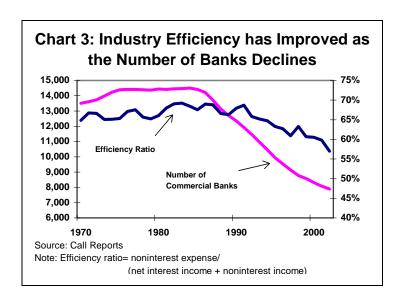
Table 2 - Companies with Most Extensive Interstate Branching Networks (Proforma - based upon 6/30/2003 Summary of Deposits Survey) Reported Number of **Deposits** Number of Banking Offices (\$ billions) Company Name States BANK OF AMERICA CORP 31 5,830 513 (1) J.P. MORGAN CHASE & CO. 26 2,429 353 (2)U.S. BANCORP 25 2,305 125 WELLS FARGO & COMPANY 23 228 3,017 DICKINSON FINANCIAL CORP 16 134 2 REGIONS FINANCIAL CORP 15 1,458 54 (3) CITIGROUP INC. 13 797 183 CHARLES SCHWAB CORP 13 5 29 WACHOVIA CORP 12 2.667 197 **BB&T CORP** 12 1,117 54 (1) Proforma after merger of Bank of America with FleetBoston (2) Proforma after merger of JPM Chase and Bank One (3) Proforma after merger of Union Planters into Regions Financial

#### **Branching Seems to Improve Financial Performance**

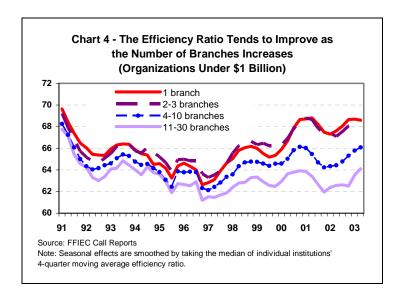
Industry efficiency, a measure of the cost of generating a dollar of revenue, has improved as the number of charters has declined. (See chart 3).<sup>5</sup> There are many reasons for overall efficiency improvements. These can include new fee and other revenue sources, staff reductions, simplifying overhead, and advances in technology to name a few possibilities. However, evidence also suggests that branching has contributed to the improvement.

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<sup>&</sup>lt;sup>5</sup> The efficiency ratio is calculated by dividing total noninterest expense by the sum of net interest income plus noninterest income.



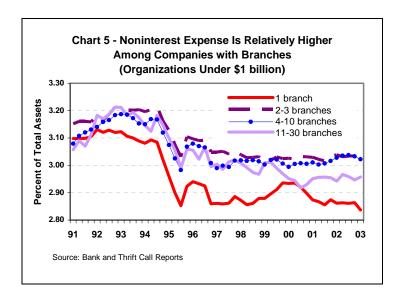
To illustrate the contributions of branching strategies to operating performance, banking organizations under \$1 billion were segmented by number of branches.<sup>6</sup> As shown in Chart 4, efficiency ratios improve markedly for banks as they operate more branches. The median efficiency ratio for a banking organization with only one office was 68.6 percent during first quarter 2004, notably higher (worse) than the 64.1 percent for companies with 11 or more branches.



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<sup>&</sup>lt;sup>6</sup> Organizations, for this analysis, are bank holding companies and other individual institutions with consolidated assets under \$1 billion. The \$1 billion cutoff was chosen in an attempt to constrain analysis to banks that are similar in size and strategy. To smooth out seasonal effects, four-quarter moving averages are prepared, and the medians of these measures are graphed in the related charts.

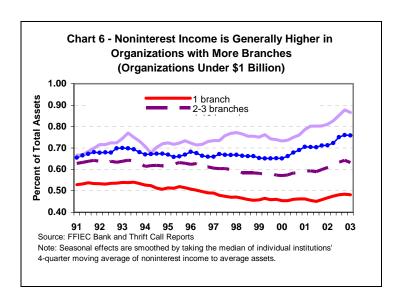
On the surface, it would seem unusual that banks with larger branch networks are the most efficient because branches are expensive. Indeed, estimates indicate that a typical branch may cost upward of \$2 million to open, notwithstanding ongoing staffing and management costs. Moreover, as shown in Chart 5, noninterest costs are higher relative to assets for companies with more branches. Perhaps surprisingly though, cost decisions may not be the driving force behind improved performance of banks with more branches.



As shown in Chart 6, banking organizations with larger branch networks generally have much higher non-interest revenue. In fact, banks with more than 11 branches have a median non-interest income ratio 39 basis points, or 82 percent, higher than banks with one office. Organizations with more branches therefore, seem better able to generate greater relative revenue, and therefore, they have a better efficiency ratio.

<sup>7</sup> Bancology, August 2003.

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Berger and Mester document this increase in efficiency driven by improvement in revenue, but not in costs. <sup>8</sup> They suggest several possible explanations. One may be that banks, by adopting new technologies and providing new services or higher service quality, may have increased costs, but revenue enhancements outpaced the higher costs. They also note that the trends appear more pronounced at companies involved in mergers, perhaps indicating a more aggressive adoption of new technology and offering of new services. They also hypothesize that merging companies may have benefited from a shift into higher risk and higher return investments to take advantage of diversification gains related to the mergers.

These improved efficiencies for banks with larger branch networks are reflected in overall profitability.

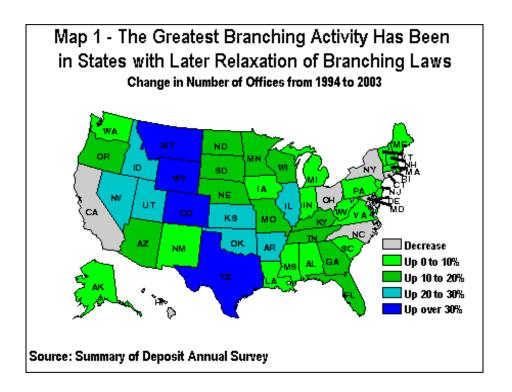
For organizations under \$1 billion in consolidated assets, the median return on assets for organizations with more than 11 branches is 23 basis points higher than those with one office.

#### **Economic and Demographic Factors Also Drive Branch Growth**

Despite the steady rise in physical branches during the past decade, the increase was not uniform across the country (see Map 1). Not surprisingly, states with the largest branch growth rates are those where relaxation of branching laws occurred later. For example, from 1994 to 2003, the greatest increases in branches occurred in

<sup>&</sup>lt;sup>8</sup> Berger, A.N. and L.J. Mester (2003)."Explaining the dramatic changes in perforemance of US banks: technological change, deregulation, and dynamic changes in competition. *Journal of Financial Intermediation*, 12:57-95.

the former unit banking states of Colorado, Wyoming, Montana and Texas, which had over a 30 percent increase in the number of branches. These states did not begin to ease intrastate branching restrictions until the late 1980s or later. In contrast, the number of branches actually declined in ten states. These states included the major banking markets of California, New York, and North Carolina. These states generally had no or minimal branching restrictions or earlier relaxation of restrictions. In addition, in-market mergers in these major markets during the 1990s resulted in closure of some overlapping branches.



Branch location decisions made by each bank's management team are based on individual company and market characteristics, including bank strategies, product offerings, management depth, and level of competition. Many of the factors that determine the location of branches are very localized, sometimes at the county, zip code, or even lower level. For example, traffic patterns and ability of consumers to access a branch is extremely

<sup>&</sup>lt;sup>9</sup> Kroszner, R.S. and P.E. Strahan (1999). "What Drives Deregulation? Economics and Politics of the Relaxation of Bank Branching Restrictions." *Quarterly Journal of Economics*, 114:1437-67

important. Indeed, an analysis conducted by MarkeTech Systems International estimated that location characteristics may explain 45 to 55 percent of deposit formation.<sup>10</sup> While the current paper does not ascribe a percentage of importance for factors driving branching decisions, it is clear from an examination of the most active branching markets that economic vibrancy of a community and demographic patterns are very important.

Table 3 shows the top and bottom states in terms of average employment growth for the years 1994 - 2003. Also included are rankings for population growth, per capita income levels, change in number of bank offices, and population per office. Table 4 ranks large metropolitan markets using the same factors. As might be expected, population growth appears to be strongly correlated with employment growth. Further, in general, branching growth also tends to follow these two economic drivers. Interestingly, per capita income and the density of offices (population per office) show a less clear relationship, though the strongest branch growth states (and to some degree, the large metropolitan markets with strong growth) generally seem to have greater population per office.

<sup>&</sup>lt;sup>10</sup> Hopson, Hal, and Stephen Rymers, "Predicting Branch Performance," *Banking Strategies*, November/December 2003.

TABLE 3 - ECONOMIC FACTORS AFFECT BRANCHING ACTIVITY

Top and Bottom States in Terms of Average Employment Growth

	Average Employment Growth 1994-2003 (Rank)	Average Population Growth 1994-2003 (Rank)	Average Per Capita Income 1994-2003 (Rank)	Change in Number of Offices 1994-2003 (Rank)	Office Density (Population per Office) (Rank)
TOP TEN STATES					
Nevada	1	1	16	6	3
Arizona	2	2	38	16	2
Utah	3	5	46	11	9
Idaho	4	6	42	7	30
Florida	5	7	21	23	11
Colorado	6	3	9	1	17
Texas	7	8	29	4	6
Georgia	8	4	28	12	13
New Mexico	9	13	48	25	10
New Hampshire	10	14	7	29	22
BOTTOM TEN STATES					
Indiana	42	29	32	41	35
Michigan	43	41	20	39	16
Ohio	44	47	23	42	29
Pennsylvania	45	48	18	35	37
Alabama	46	35	43	28	21
Illinois	47	32	8	8	25
New York	48	44	5	44	8
Connecticut	49	42	2	46	28
Hawaii	50	31	17	51	7
District of Columbia	51	51	1	50	31

Source: HAVER Analytics/Bureau of Economic Analysis, Call Reports, Summary of Deposit Survey Each ratio is ranked from highest to lowest for the 50 states and the District of Columbia. Employment and population growth are averages of year-to-year changes.

Office density =Total 2003 population estimates divided by number of offices.

TABLE 4 - Metro Level Office Growth also Correlates with Economic Factors								
(Large metro areas - over 500 offices in market)								
	Average	Average	Average	Change in	Office			
	Employment	Population	Per Capita	Number of	Density			
	Growth	Growth	Income	Offices	(Population/			
	1994-2003	1994-2003	1994-2003	1994-2003	Office)			
Metro Name	(Rank)	(Rank)	(Rank)	(Rank)	(Rank)			
Phoenix-Mesa AZ	1	1	29	10	4			
Tampa-St Pete-Clearwater FL	2	10	28	28	14			
Atlanta GA	3	2	17	4	13			
Dallas TX PMSA	4	3	13	7	7			
Denver CO PMSA	5	4	10	15	11			
San Diego CA	6	14	23	13	2			
Houston TX PMSA	7	5	15	2	6			
Orange County CA PMSA	8	6	12	20	5			
Washington DC-MD-VA-WV PMSA	9	7	4	5	18			
Boston -NECMA	10	17	8	12	19			
Minneapolis-St Paul MN-WI	11	8	9	11	9			
Indianapolis IN	12	12	24	19	22			
Kansas City MO-KS	13	13	22	30	26			
Seattle-Bellevue-Everett WA PMSA	14	9	6	8	15			
Miami FL PMSA	15	11	30	14	8			
Nassau-Suffolk NY PMSA	16	23	3	25	17			
Cincinnati OH-KY-IN PMSA	17	19	25	1	29			
New Haven-CT NECMA	18	24	1	26	24			
Baltimore MD PMSA	19	21	19	24	20			
Philadelphia PA-NJ PMSA	20	26	14	27	21			
Chicago IL PMSA	21	15	11	17	12			
Newark NJ PMSA	22	20	5	29	28			
Detroit MI PMSA	23	28	16	16	10			
St Louis MO-IL	24	25	20	18	16			
Milwaukee-Waukesha WI PMSA	25	27	18	3	27			
Bergen-Passaic NJ PMSA	26	22	2	22	30			
Pittsburgh PA	27	30	26	23	25			
New York NY PMSA	28	16	7	9	3			
Cleveland-Lorain-Elyria OH PMSA	29	29	21	6	23			
Los Angeles-Long Beach CA PMSA	30	18	27	21	1			

Notes: Office density = Total 2003 population / (number of branch plus main offices)
Source: HAVER Analytics/Bureau of Economic Analysis, Call Reports, Summary of Deposit Survey

#### Going Forward - Will the Pace of Branch Growth Continue?

Concerns have been voiced for some time about the high cost of branching and the potential overbranching of certain markets, especially with the availability of alternative banking technology. For example, a book published in 1996 predicted significant branch closings due to an increase in ATM, telephone, computer and direct deposit services, indicating that "The expense of maintaining bank branches has increased while the importance of branches to customers has declined." Moreover, several recent articles have mentioned some "hot" markets (for example, Chicago, New York City, and Texas), where banks are aggressively pursuing branching strategies, in some cases suggesting these markets have become "overbranched." 12

However, despite technological advances that have made it easier to conduct financial services activities without physically entering a bank branch, it seems that banking consumers like the convenience of bank branches. Surveys conducted by the Federal Reserve Board indicate that the single most important factor influencing a customer's choice of banks is the location of the institution's branches. While it would be difficult to predict what consumer preferences for physical branches will be going forward, the general trends suggest that branching will continue, at least in some markets.

As mentioned above, well-executed branching strategies, while costly, may improve overall operating results. Given the very micro nature of branching decisions, it is not practical in this paper to review the thousands of local markets to determine which may be conducive to branching activity. However, in a very broad sense, given our state and large metropolitan area analysis, it seems reasonable that branching activity will center around markets with strong population and employment growth.

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<sup>&</sup>lt;sup>11</sup> Spiegel, John, Gart, Alan, and Gart, Steven, <u>Banking Redefined: How SuperRegional Powerhouses are Reshaping</u> Financial Services. Page 462, 1996.

<sup>&</sup>lt;sup>12</sup> For example: Hallinan, Joseph, "As Banks Elbow for Consumers, Washington Mutual Thrives," *Wall Street Journal*. November 6, 2003 and Thompson, Laura K., "Overbranched? No Stopping Texas Stampede," *The American Banker*. March 11, 2004.

<sup>&</sup>lt;sup>13</sup> Olson, Governor Mark W., "Remarks at the Fortieth Annual Conference on Bank Structure and Competition, Sponsored by the Federal Reserve Bank of Chicago, Chicago, Illinois." May 6, 2004.

Going forward, other trends in the retail banking business will also have implications for the future pace of branching, such as deposit growth and the overall attractiveness of the consumer sector. Nationwide, deposit growth varied during the ten years ending June 30, 2003 (averaging 5.5 percent), with the strongest gains coming after 2000. This trend was attributable, in part, to the decline in the equity markets. While the stock market is currently volatile, the general trend and expectation is that when the stock market stabilizes and increases, deposit growth tends to decline. Moreover, while the consumer sector has remained strong, particularly the mortgage market and related business, it is uncertain whether retail banking will retain the same level of its current attractiveness when interest rates rise or if other sectors replace the consumer as the driver of much of the growth in the banking sector.

#### The FDIC's Summary of Deposit Survey

Much of the data used in this report has been taken from the FDIC's Summary of Deposits (SOD) survey. Under this survey, as of June 30 each year, insured banks report to the FDIC additions/changes to office structure. Savings associations report similar information to the Office of Thrift Supervision. Each insured institution is required to update information on the location and type of each of its banking offices, including deposit information. For the purposes of the survey, to constitute a banking office, the customer must be able to open accounts, make deposits and borrow money. This definition of office therefore excludes numerous other business locations such as loan production offices, consumer credit offices and automated teller machines where an insured institution provides more limited operations. However, even within these limitations, the survey collects information on over 87,000 offices.

The SOD survey collects only limited financial information on individual offices, focusing on deposits. For instance it does not collect other information such as loan volume or branch income. Institutions have flexibility on how to allocate deposits to each office, but generally deposits are assigned by the institution in a manner consistent to their internal reporting practices. The institution may report deposits in any manner that logically reflects the deposit-gathering activity. This can include: office of origination, the office where the deposit is most active, the office assignment used to compensate branch managers or others, or the office closest to the account holder's address.

The SOD survey is widely used by banks, consumers and regulators for a variety of purposes. Certainly it is a source of important information for consumers seeking to know whether their bank office belongs to an FDIC- insured institution. Also, it provides important information for anyone interested in deposit market share. For example, the banking agencies and the Department of Justice use summary of deposit information as a source of information for measuring market concentrations implications of mergers or other consolidations. The SOD survey can be found at <a href="http://www2.fdic.gov/sod/">http://www2.fdic.gov/sod/</a>.

The 2004 Summary of Deposit Survey is now underway, with 2004 Results and related FDIC analysis planned for release in October 2004.

#### References

- Avery, Robert B. et al. 1997. Changes in the Distribution of Banking Offices. *Federal Reserve Bulletin*, September 1997: 707-725.
- Bancography. 2003. New Branch Survey Finds Costs Approaching \$2 Million. *Bancology* 8, August 2003.
- Berger, A.N., and Mester, L.J. 2003. Explaining the dramatic changes in performance of US banks: technological change, deregulation, and dynamic changes in competition. *Journal of Financial Intermediation* 12 (2003): 57-95.
- Critchfield, T. et al. 2004. Community Banks: Their Recent Past, Current Performance, and Future Prospects. Future of Banking Study FOB-2004-03.1. Federal Deposit Insurance Corporation.
- Dick, Astrid A., 2003. Market Structure and Quality: An Application to the Banking Industry. Finance and Economics Discussion Series 2003-14. Federal Reserve Board.
- Dick, Astrid A., 2003. Nationwide Branching and its Impact on Market Structure, Quality and Bank Performance. Finance and Economics Discussion Series 2003-35. Federal Reserve Board.
- Epley, Donald R. 2003. Measurement of Local Economic Growth as a Critical Part of Market Analysis. *Real Estate Issues* 28, no. 2.
- First Manhattan Consulting Group. 2003. De Novo branching: Pathway to Profitable Growth? Value-Based Management white papers.
- Hallinan, Joesph. (2003). As Banks Elbow for Consumers, Washington Mutual Thrives. *Wall Street Journal*, November 6, 2003.
- Hopson, H, and Rymers, S. 2003. Predicting Branch Performance. BAI *Banking Strategies* LXXIX, no. V (sidebar to Stoneman article).
- Jones, K.D., and Critchfield, T. 2004. The Declining Number of U.S. Banking Organizations: Will the Trend Continue? Future of Banking Study FOB-2004-02.1. Federal Deposit Insurance Corporation.
- Kroszner, R.S., and Strahan, P.L. 1999. What Drives Deregulation? Economics and Politics of the Relaxation of Bank Branching Restrictions. *Quarterly Journal of Economics* 114:1437-67.

- Olson, Governor Mark W. 2004. "Remarks at the Fortieth Annual Conference on Bank Structure and Competition, Sponsored by the Federal Reserve Bank of Chicago, Chicago, Illinois." May 6, 2004
- Radecki, Lawrence J. 1998. The Expanding Geographic Reach of Retail Banking Markets. Federal Reserve Bank of New York *Economic Policy Review* 4, no 2.
- Rhoades, Stephen A. 2000. Bank Mergers and Banking Structure in the United States, 1980-1998. Staff Study 174. Federal Reserve Board.
- Spiegel, J, Gart, A, and Gart, S. 1996. <u>Banking Redefined: How SuperRegional Powerhouses are Reshaping Financial Services</u>. Page 462, 1996.
- Stoneman, Bill. 2003. Site Selectivity. BAI Banking Strategies. LXXIX, no. V.
- Thompson, Laura K. 2004. Overbranched? No Stopping Texas Stampede. American Banker. March 11, 2004.