Successful strategies in interstate bank acquisitions

Richard J. Sullivan and Kenneth Spong

Richard J. Sullivan and Kenneth Spong are economists in the Policy and Special Projects Department of the Division of Bank Supervision and Structure.

1 Kenneth Spong and John D. Shoenhair. "Performance of Banks Acquired on an Interstate Basis,' Financial Industry Perspectives (Federal Reserve Bank of Kansas City). December 1992, pp. 15-32. ² The banks also must meet several other criteria which are explained in more detail in Spong and Shoenhair, "Performance of Banks," pp. 15-16. For example, in order to get meaningful performance measures for before and after acquisition, both studies exclude failing and failed bank acquisitions. The Spong and Shoenhair study also included banks acquired on an interstate basis in 1985. The present study, however, had to exclude this group of banks, because it did not contain enough banks to permit a separate analysis of strong and weak performers.

Interstate ownership of banks is now a common element across many U.S. banking markets. Interstate banking, moreover, is gaining further impetus from recent federal legislation and the general trend toward consolidation in banking. The Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994, for instance, replaces the wide variety of state laws that have governed interstate entry, and it allows banking organizations to acquire banks in any state as of September 29, 1995. This act also will allow banks to branch interstate through mergers, beginning June 1, 1997, unless individual states choose to adopt alternative legislation.

As interstate banking continues, the performance and success of the banks that are acquired will be the key factor that determines how much consolidation will occur and which organizations will be the major interstate participants. Banking organizations that can operate newly acquired banks successfully will clearly have a strong advantage and the investor support for further expansion. On the other hand, organizations with weak performing acquisitions are likely to face a variety of constraints in making subsequent acquisitions and may even become acquisition targets themselves.

In a study of banks acquired interstate in the years from 1985 to 1987, Spong and Shoenhair found that the typical acquisition performed in much the same manner as banks remaining under in-state ownership. However, a considerable range in performance existed across these acquisitions and some were far more successful than others. This study reexamines the

same group of banks in order to identify the strategies and characteristics that distinguish the better performing acquisitions from those with weaker performance. The strategies leading to successful acquisitions will be of obvious importance to banking organizations pursuing interstate expansion and will help point out many of the factors bankers must address when entering new markets. Actions that have led to weak performance should also be of interest to bankers and bank supervisors in identifying the potential pitfalls in interstate expansion.

This study begins with a discussion of the criteria used to divide the acquired banks into strong and weak performers. Subsequent sections examine the basic strategies, characteristics, and challenges reflected in the interstate acquisitions, and their possible contribution to successful or weak banking performance. Among the topics covered in these sections are lending and other asset strategies, income and expense characteristics and strategies, and several acquisition factors, such as the prices paid for interstate acquisitions.

Characteristics of the acquired banks

To be considered for this study, a bank must be a full service bank with a normal range of banking operations, and it must have been acquired on an interstate basis in either 1986 or 1987.² A total of 169 banks met these conditions. These banks had an average asset size in the \$500 to \$600 million range, as measured after their acquisition, and they were spread across all regions of the United States.

³ See Spong and Shoenhair, "Performance of Banks," p. 18, for more information on the construction of peer groups. Fifteen different peer groups are used in the two studies. These peer groups reflect three size categories based on a bank's total asset holdings-\$25-100 million, \$100-500 million, and \$500 million - \$10 billion—and five location categories, which are constructed by placing each state into one of five regions based on geography and economic focus.

- ⁴ The years 1988 and 1989 were chosen to correspond to the final two years of data used in the Spong and Shoenhair study. While more recent data are now available, subsequent mergers and acquisitions have significantly changed the structure of many of the acquired banks and thus prevent these banks from being compared across more recent periods.
- ⁵ Trend for each acquired bank is measured using the estimated slope coefficient in a simple timetrend model of relative returns to average assets.
- ⁶ The other 79 banks acquired in 1986 or 1987 had a mixed record of performance either because their earnings did not show the same pattern in both 1988 and 1989 or the trend in

Table 1

Number of acquired banks by year of acquisition and ROAA performance category

	Year of a			
ROAA performance	1986	1987	Total	
Strong	21	23	44	
Weak	24	22	46	
Total	45	45	90	

To place the acquired banks into strong and weak performance categories, this study takes each bank's earnings record after acquisition and compares it to that of a group of peer banks remaining under in-state ownership. For each acquired bank, the appropriate peer bank statistics are a composite of all full service banks remaining under in-state ownership that have similar size and location characteristics.3 These peer bank comparisons allow a bank's performance to be adjusted for general industry trends and local economic conditions and should thus provide a more accurate picture of its overall success. Because the 1986 acquisitions have had one more year of post-acquisition experience compared to the 1987 acquisitions, the following analysis also divides the acquired banks into two separate groups based on a bank's year of acquisition.

The initial test for setting up strong and weak performance groups entails a comparison of an acquired bank's return on average assets to that of its peer banks (i.e., ROAA for the acquired bank minus the ROAA for its peer group). To be in the strong performance category, an acquired bank must have a return relative to peer banks in both 1988 and 1989 that exceeds the median value for its entire acquisition

group. Weak performers are those with relative returns in both 1988 and 1989 that fall below the median value for the entire acquisition group. This first criterion thus requires banks to have maintained a consistent level of performance over a period of years.

Second, to be classified as a strong performer, a bank must further demonstrate a rising trend after acquisition in its relative return on average assets. Weak performers, on the other hand, must show a falling trend. Conse-

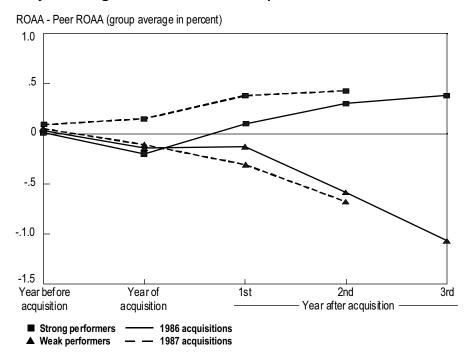
quently, strong or weak performance is not only based on earnings levels, but is also determined by whether a bank shows a relative improvement or deterioration in performance after its acquisition.

Ninety of the acquired banks meet both performance criteria, and Table 1 shows a breakdown of these banks by the year of their acquisition and ROAA performance category. A nearly equal number of banks are present in the strong and weak performance groups for both acquisition years.

The earnings trends within the performance groups generally reflect the selection criteria used to construct the groups, and substantial differences are apparent between the strong and weak banks (Chart 1). Although the strong and weak performance groups both began with essentially the same average ROAAs as peers, the average ROAA of the weak performers had declined to at least 50 basis points below peer banks by the second year after acquisition. Strong performers, in contrast, had achieved average ROAAs at least 25 basis points above their peers. For the 1986 acquisition group, the divergence between strong and weak performers widened further in

Chart 1

Profitability of strong and weak interstate acquisitions



the third year after acquisition. Many of these profitability differences, moreover, were evident as early as the first year after acquisition.⁷

Lending and other asset strategies

In entering new, out-of-state markets, a key challenge facing banking organizations is developing a sound and successful lending and investment strategy. Banking organizations, for instance, must evaluate the lending and investment policies at the banks they acquire and begin making judgments about the creditworthiness of existing and potential borrowers—all without the advantage of extensive experience in the market. In this process, interstate organizations will have to address such issues as the amount of lending to undertake, types of credit customers to pursue, policies regarding credit standards and asset

quality, and the overall growth in assets at acquired banks.

One basic indicator of the acquisition strategies of interstate organizations and their subsequent lending policies is the loan-to-asset ratios of the acquired banks. Loan-to-asset ratios, for example, might show whether an organization is acquiring banks that are already strong lenders or banks with a need for further improvement. After acquisition, the loan-to-asset ratio may reflect the ability of the bank and its new ownership to find credit customers. Also, because loans typically have higher rates of return and risk than most other banking assets, the loan-toasset ratio may provide insights into an organization's risk/return tradeoffs.

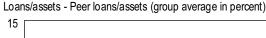
Our analysis suggests that most interstate acquisitions that have performed well began with strong, established lending

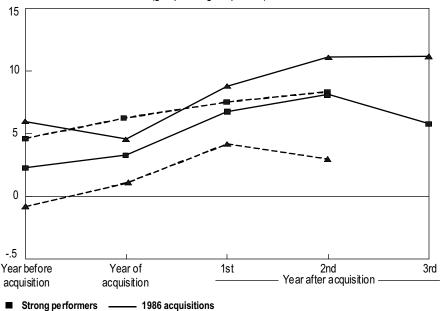
earnings did not correspond to the study criteria. Because these banks did not demonstrate a clear performance trend, they are not included in the analysis. We also categorized strong and weak performance using return on equity (ROE) as the profitability measure. The results were much the same with the ROAA and ROE measures. This paper, though, only presents the ROAA results, mainly because ROAA is a widely accepted standard of performance and because bank capital and ROE tended to fluctuate more from year to year. ⁷ The peer bank comparisons presented in the charts and tables for this article are an average of the differences between the individual acquired banks and the peer bank data. In addition, we analyzed the median values of these peer differences, as well as average financial ratios for the acquired banks alone. These other measures produced similar results and are available from the authors

upon request.

Chart 2

Loan-to-asset ratios of strong and weak interstate acquisitions





operations and then worked hard to build upon this strength. At acquisition, the banks with strong profit performance typically had loan-to-asset ratios above that of their peers, and these ratios then increased moderately after acquisition (Chart 2). The loan-to-asset ratios of the weak performers also increased and stayed above that of peer banks throughout the post-acquisition period. In fact, the weak performers acquired in 1986 ended up with an average loan-to-asset ratio well above peer banks and even above that of the strong performance groups. Strong performing interstate acquisitions thus appear to have occupied more of a middle ground by showing moderation in building and expanding their lending business.

1987 acquisitions

The types of loans made by the acquired banks can also provide a picture of their lending strategies and profit objectives.

Some organizations believe that a strategy of emphasizing a particular type of loan, such as real estate or consumer loans, best enhances profitability and a bank's lending expertise. In contrast, other organizations may prefer to develop a more balanced or diversified loan portfolio. The data indicate that the strong performers generally lagged behind an industry shift toward real estate lending and, instead, continued to maintain a strong focus on business and consumer lending.

Each performance group increased real estate lending

as a proportion of total lending (top panel, Table 2). However, in relation to peer banks, only the 1986 weak performance group maintained a higher and rising commitment to real estate lending (bottom panel, Table 2). The 1987 group of weak performers remained below peer banks on real estate lending, while the strong performance groups showed an overall decline relative to peers in this lending category.

Commercial and industrial lending and consumer lending typically declined as a percent of total loans at the acquired banks, but much of this was also a reflection of industry trends. After acquisition, the 1986 and 1987 strong performance groups actually showed less of a decline in these categories compared to peer banks. The 1986 weak performance group made a notable shift away from business lending during this period, while

Weak performers

Table 2

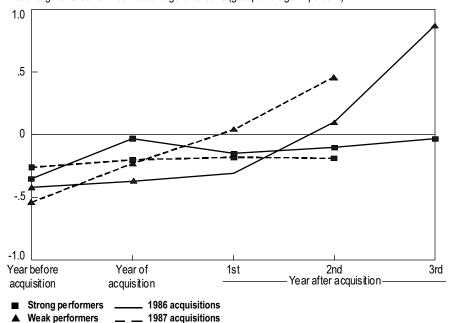
Type of loan as a percentage of total loans, by ROAA performance category

	Acquisition	ROAA performance		Year before	Year of	Year	after acquis	sition
	year	category	Type of loan		acquisition	1st	2nd	3rd
					Perce	nt of total I	oans	
Average value	1986	Strong	Real estate Commercial & industrial Consumer	39.4 23.2 28.6	39.8 22.6 27.0	42.4 21.8 25.9	43.3 23.5 25.0	45.6 21.7 24.9
		Weak	Real estate Commercial & industrial Consumer	41.2 23.5 29.8	43.2 22.5 29.1	48.4 19.8 26.8	49.5 17.7 26.7	51.5 16.1 25.4
	1987	Strong	Real estate Commercial & industrial Consumer	36.8 32.1 18.1	39.7 30.7 18.5	40.6 31.4 18.4	43.6 29.7 18.3	
		Weak	Real estate Commercial & industrial Consumer	36.3 32.7 24.6	40.4 30.5 24.0	40.8 29.1 25.6	43.1 28.7 23.9	
				Per	cent of total lo	oans relativ	ve to peer ba	anks
Peer comparisons	1986	Strong	Real estate Commercial & industrial Consumer	.6 -2.5 2.3	-1.2 -3.0 2.5	-2.4 -2.4 2.4	-3.7 3 2.3	-3.1 -1.6 3.1
		Weak	Real estate Commercial & industrial Consumer	1.7 -2.1 5.8	1.7 -3.0 6.6	3.4 -4.2 5.3	2.7 -5.7 5.6	3.0 -6.7 4.8
	1987	Strong	Real estate Commercial & industrial Consumer	-1.9 3.7 -3.4	-2.1 3.3 -2.6	-3.3 4.2 -1.9	-3.0 4.0 -1.2	
		Weak	Real estate Commercial & industrial Consumer	-4.4 7.2 3.2	-3.4 5.6 3.2	-4.9 5.0 5.2	-4.7 5.7 4.0	

Chart 3

Net charge-offs for strong and weak interstate acquisitions





the 1987 weak performance group continued to do more business and consumer lending than peer banks. Although the success or weakness of these particular lending strategies may be a function of the prevailing economic conditions, the strong performance groups appeared to be the most successful at pursuing a balanced lending focus and maintaining a credit relationship with the business community.

Credit quality provides another indication of lending strategies, as well as the relative success of banking organizations in entering new markets and finding acceptable credit customers. In fact, at most banks, the quality of the loan portfolio serves as the best measure of a bank's management and its chances for success. As shown in Chart 3, both the strong and weak performance groups began with sound loan portfolios. In the

year before acquisition, net charge-offs were well below that of peer banks for all the acquisition groups. However, after acquisition, only the strong performers were able to avoid a substantial deterioration in credit quality and stay in a favorable position relative to peer banks. Loan losses for the weak performing groups rose significantly after acquisition and, in most cases, were much worse than peer levels by the second and third year after acquisition.8

These figures thus indicate that the success of an inter-

state acquisition clearly hinges on maintaining a sound loan portfolio. While such numbers do not provide insights into what steps the acquired banks took in assessing creditworthiness, the credit quality record of the strong performance groups may be due, in part, to the gradual approach these banks took in adjusting their loan-to-asset ratios and lending focus.

The growth in assets at acquired banks may provide additional evidence on interstate acquisition strategies and performance. Interstate organizations are likely to favor attractive, growing markets and banks with good prospects for expansion. After entry into a new market, asset growth may be a good test of an organization's product line, marketing skills, and competitiveness. Many organizations also view growth as a means of overcoming much of the dilution in earnings per share associated with acquisitions. At

⁸ Noncurrent assets, another measure of asset quality, also showed a similar trend, rising substantially for weak performers while remaining well below peer bank levels for strong performers.

the same time, rapid growth may be a real challenge to the management skills of an organization and could entail added risk taking and compromises in credit standards.

Our analysis indicates that acquisitions with rapid asset growth relative to peer banks often fare poorly in generating profits. Both the 1986 and 1987 weak performing banks had exceptionally high asset growth rates in the year before acquisition and this growth remained above peer levels for several years (Chart 4).

Among the strong performers, asset growth was at a moderate, steady pace, both before and after acquisition. Thus, while growth may be important in establishing a market presence and eliminating earnings dilution, excessive growth could hurt profitability by leading to a deterioration in asset quality or by inhibiting control of overhead.

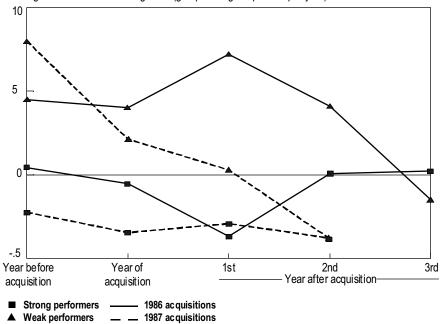
Changes to income and expenses

Strong profit performance in a new market will also depend upon the ability of bank management to pursue appropriate strategies with respect to pricing of loans and deposits, developing sources of non-interest income, and controlling expenses. Each of these strategies clearly represents a challenge for interstate banking organizations as they adjust to the competitive structure of the markets they enter and as they establish banking opera-

Chart 4

Asset growth rates of strong and weak interstate acquisitions





tions and policies. One way to examine these characteristics and strategies of acquired banks is to divide bank earnings into four basic income and expense components: net interest income, noninterest income, overhead expenses, and net other income and expenses. As a comprehensive measure of income, these components will thus provide a picture of the differences between strong and weak performers in generating income.

This earnings relationship can be expressed as:

ROAA = (net interest income/average assets)

- + (noninterest income/average assets)
- (overhead/average assets)
- + (net other income and expenses/ average assets)

Table 3

Components of ROAA for strong and weak performers, year before acquisition and 1989

	1986 acquisitions			1987 acquisitions				
	Year before acquisition		1989		Year before acquisition		1989	
	Strong	Weak	Strong	Weak	Strong	Weak	Strong	Weak
ROAA	1.02%	.96%	1.27%	11%	1.00%	.95%	1.42%	.39%
Net interest income/ average assets	4.35	4.32	4.27	3.64	3.76	3.75	4.17	3.78
Noninterest income/ average assets	.84	.91	1.08	.92	.80	.73	.84	.80
Overhead/ average assets	3.59	3.70	3.22	3.89	2.98	3.06	2.84	3.46
Net other income and expense/average assets	58	58	86	78	58	47	75	73

In the year before acquisition, the values for these four components are similar for the strong and weak performance groups (Table 3), reflecting the fact that ROAA was similar for each group. By 1989, however, the levels of each of the four components had changed in a fashion that led to a much higher ROAA for the strong performers. For example, the value in 1989 for net interest income relative to average assets was 4.27 percent for the 1986 strong performance group, which greatly exceeded the 3.64 percent earned by the 1986 weak performance group. Changes in overhead also favored the strong performance groups and helped contribute to their large earnings advantage in 1989.

Which of the four components contributed most to the widening of the profit gap? This question can be answered by analyzing the changes in ROAA and its components across the strong and weak performance groups. Analysis of these changes shows that the two most important factors were overhead and net interest income (see the Appendix for this analysis).

Control of overhead is a key objective cited in many acquisition plans. Also, active bank acquirers typically count on expense control to make up a notable portion of the earnings dilution encountered in an acquisition. To control overhead, an acquirer could pursue a strategy of purchasing a bank with above average levels of overhead and then trying to improve its productivity. Another strategy would be to purchase a bank

with an established record of overhead control and implement policies that build upon that record.

The strong performance groups began with overhead-to-average asset ratios below that of peer banks, thus indicating a preference by many interstate organizations to acquire banks that have already demonstrated a good record of cost control. As shown in Table 3, the strong performers continued to make progress on reducing overhead, and this pattern also was evident in comparisons with peer banks. In contrast, the overhead-to-asset ratio of weak performers, after a small initial dip, rose to levels much higher than that of the strong performers.

Other measures of expenses and productivity show similar trends. Average assets per employee rose for strong performers in a fashion not matched by weak performers (Chart 5). Personnel expense as

⁹ These peer bank comparisons are not included in the paper, but are available upon request from the authors. The other comparisons mentioned in this section, but not presented in the tables or charts, can be obtained upon request.

a percentage of operating income and overhead as a percentage of operating income also reveal better cost control by strong performers. As a result, control of expenses would appear to be one of the most important factors in achieving acquisition success.

Pricing loans and deposits appropriately is also crucial to strong profit performance. Underpricing or overpricing of loans and deposits, for instance, could hurt profitability and fail to generate a desirable level of business and type of customer. In the

acquired banks, maintenance of net interest income was important to success—a result that can be investigated more closely by looking at two determinants of net interest income, the net interest margin and the earning asset ratio. This relationship can be expressed as:

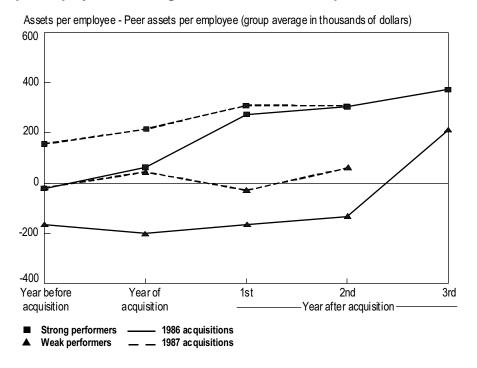
(net interest income/average assets)

- = (net interest income/average earning assets) × (average earning assets/ average assets)
- = net interest margin × earning asset ratio.

For the acquired banks, the earning asset ratio showed a similar rising trend for both the weak and strong performance groups. Net interest margin, however, moved decisively in favor of the strong performance groups. Consequently, the ability of strong performers to maintain

Chart 5

Assets per employee for strong and weak interstate acquisitions



net interest margins was another major factor in their earnings success.

The other earnings components, noninterest income and net other income and expenses, played far less of a role in the divergent profit trends of weak and strong performers (Appendix). In recent years, developing noninterest sources of income has been a strategy many have suggested for achieving superior profit performance. Yet there is some recognition that much of the market for feebased bank services is highly competitive, and profitability is proving more elusive than expected in many of the new feegenerating activities in banking. Overall, changes in noninterest income led to a wider gap in profitability between strong and weak performers only for the 1986 acquisition group. In a similar manner, net other income and expenses did not

Table 4

Acquisition price, by performance category*

Acquisition year	Performance	Profit measure			
	category	ROAA	ROE		
		Average price-to-book value			
1986	Strong	2.25 (15)	2.29 (14)		
	Weak	2.29 (17)	2.26 (14)		
1987	Strong	2.09 (14)	2.15 (15)		
	Weak	2.25 (9)	1.86 (12)		

^{*} Number of observations are in parentheses. The number of observations is less than the number of banks in our study because many sample banks were acquired in the sale of a bank holding company, and so the same purchase price would apply to several sample banks. In these cases, the surviving banks from a particular acquisition were consolidated for each year in the sample period, and the performance category was based on the consolidated results.

Also, some observations represented several original acquisitions that were subsequently merged during the sample period. The price-to-book values for each of the original acquisitions were combined into a weighted price-to-book value, with the weights determined by the proportion of the original acquisition's book value relative to the total book value of the merged institution.

pp. 13-23.

make a consistent contribution to the trends in profitability.

Acquisition factors: Purchase price and geographic distance

In addition to asset and earnings strategies, a number of acquisition considerations could have an effect on the performance of the acquired banks. Two such considerations are the price paid for an interstate acquisition and the location of an acquired bank in relation to its affiliated banks and interstate parent.

The price of an acquisition is a very important factor in judging successful performance. This price not only reflects the strategies of the acquiring organization, but also incorporates a number of assumptions about the attractiveness and future performance of an acquired bank. Inter-

state organizations that pay higher prices for acquisitions typically base these prices on such factors as a bank's superior earnings record, excellent prospects, strategic importance, and attractive location. As a result, a very strong post-acquisition performance may be necessary to justify such prices and prevent earnings dilution for existing stockholders. Other organizations, though, may be more averse to the earnings dilution and other risks associated with high purchase premiums and may be more willing to look at a wider range of acquisitions. The success of these different strategies will therefore depend on how closely the prices paid for acquisitions relate to subsequent performance.¹⁰

For the acquired banks, acquisition price does not show a close relationship to profit performance (Table 4). When ROAA

¹⁰ Although there have been several studies on bank acquisition prices, these studies have typically looked at pre-acquisition performance measures and their relationship to purchase prices. In general, these studies have shown that higher prices are paid for banks with a better record of performance prior to acquisition. Examples of such studies include Benton E. Gup, et.al., "Regional Differences in Bank Merger Pricing," chapter 3 in Benton E. Gup, ed., Bank Mergers: Current Issues and Perspectives (Boston: Kluwer Academic Publishers, 1989), pp. 69-86; Larry A. Frieder and Phillip N. Petty, "Determinants of Bank Acquisition Premiums: Issues and Evidence," Contemporary Policy Issues, April 1991,

Box: The Performance of the Interstate Acquisitions of First Union and Banc One

The statistical patterns presented in this article could be attained using a variety of policies. To illustrate some specific policies and circumstances that led to differing performance results, this side box presents similarities and differences between the management of interstate acquisitions by First Union Corporation, Charlotte, North Carolina, and Banc One Corporation, Columbus, Ohio. The discussion incorporates both performance numbers and comments by each company's management and by others on acquisition strategies and policy decisions.

First Union and Banc One serve as useful case studies because they had extensive experience with interstate acquisitions (they were among the most active acquirers in our sample), and because clear differences exist in the performance of their interstate acquisitions in this study. At the end of 1989, 9.7 percent of the assets of the First Union sample banks were in the strong performance category, 29.7 percent were in weak performers, and the remaining assets were in banks with a mixed performance record. Conversely, 79 percent of the assets of the Banc One sample banks were in strong performers, and 11.6 percent were in the weak category.

Articles in the financial press report many policies toward management and acquisitions that were similar at First Union and Banc One. Both sought friendly merger partners, and generally retained the employees of acquired organizations to take advantage of ties to the local community. Both looked to acquire small-to-medium size banks in familiar, nearby markets. Given their well-developed product lines, First Union and Banc One expected to enhance profitability by selling an expanded line of services to customers at the newly acquired banks. Both organizations allowed local autonomy concerning matters of product delivery and pricing. Finally, both First Union and Banc One economized by centralizing common operations, such as data processing, product development, and marketing.

While many similarities existed between the two organizations, significant differences also were apparent. All of First Union's weak performing acquisitions were located in Georgia, and unanticipated asset quality problems characterized some of these acquisitions. As a result of this experience, First Union altered its acquisition strategy by increasing due-diligence reviews to more closely measure its credit exposure from new acquisitions. Asset problems, however, were not the only drag on First Union's operations in Georgia. Reports suggest that First Union sacrificed margins on loans to increase loan volume. Our data also indicates an aggressive lending strategy: the combined loan-to-asset ratio for First Union's acquisitions in Georgia rose to 72 percent at the end of 1989, while the average for peer banks was only 61 percent.

In addition, analysts believe that some Georgia acquisitions had management styles that did not mesh with that of First Union. For example, First Railroad and Banking Company of Georgia reportedly had a decentralized management structure when it was acquired by First Union.

¹ Saul Hansell, "How North Carolina Became America's Banking Capital," *Institutional Investor*, November 1991, p. 108.

² Steve Bergsman, "The Fastest Checkbook in Banking," Bankers Monthly, January 1990, p.28

Box: The Performance of the Interstate Acquisitions of First Union and Banc One (continued)

As a result, First Union was forced to devote considerable time and effort into building a management team at First Railroad that was compatible with its own management structure.³ Perhaps the best summary of First Union's troubles with its Georgia acquisitions is their combined overhead-to-average assets ratio: this ratio was 26 percent above the peer average by the end of 1989.

Bank One generally did not suffer such difficulties in most of its interstate acquisitions. It increased lending, but avoided asset quality problems in its merger partners by imposing high credit standards. Banc One's marketing strategy emphasized earnings, and by 1989 it had achieved a net interest margin in its strong performing interstate acquisitions that averaged 20 percent above peer. Banc One accomplished this by selling a set of high-margin products, such as credit cards, student loans, and indirect automobile financing. For example, a Banc One acquisition in 1988, Wisconsin-based Marine Corporation, had no previous experience with indirect automobile financing. But upon acquisition, it was able to start this type of lending quickly, and within three years controlled 50 percent of that market in the greater Milwaukee area. Finally, Banc One's acquisition strategy largely avoided post-merger management conflicts by including a thorough investigation of a potential acquisition's management. Banks were acquired only if their management philosophy was compatible with that of Banc One.

The policies that Banc One implemented in its strong performing interstate acquisitions corresponded to many of the high-performance characteristics identified in this article: moderate expansion of loans, quality lending, emphasis on earnings, and expense control. First Union's policies, no doubt, aimed at achieving similar results, and it achieved these goals in some of its interstate acquisitions. But for its Georgia acquisitions, analysts suggest that First Union's acquisition and loan growth strategies led to managerial complications and asset quality problems, and caused poor performance that persisted several years after acquisition. These examples thus suggest another trait of successful interstate organizations—they do a comprehensive job of planning and completing acquisitions, but remain ready to correct deficiencies in their strategies and to adapt policies to changing circumstances.

³ Bergman, "The Fastest Checkbook in Banking," p. 29.

Additional sources: "Banc One's Tactics for Excellence," *The Bankers Magazine*, September/October 1991. pp. 7-13; Steve Cocheo, "What's So Good About Banc One?," *ABA Banking Journal*, July 1991, pp. 54+; Jeanne Dugan Cooper, "First Union Plans Big Cuts at Florida Unit," *American Banker*, August 16, 1989, p. 1; Timothy J. Harris, "The Ten Best Profit Margins in Banking," *Bankers Monthly*, April 1988, pp. 61-8; Christopher K. Heaney, "When Ed Crutchfield Talks, Bankers Listen," *ABA Banking Journal*, April 1987, pp. 29-31; Rahul Jacob, "Banking's Best Acquirer: Banc One's John McCoy," *Fortune*, July 29, 1991, p. 106; Yvette D. Kantrow, "First Union, PNC Establish Cost-Cutting Pattern in Acquisitions," *American Banker*, December 7, 1988, p. 39; "Nothing Could be Finer, To Bank in Carolina," *The Economist*, March 26, 1988, pp. 23-5; Joseph F. Sanchez and Keven Stiroh, "Banc One Mines Synergies in Wisconsin," *American Banker*, September 26, 1990, p. 16; J. Christopher Svare, "Acquiring for Growth and Profit: The Banc One Experience," *Bank Management*, November 1990, pp. 18-24; Robert Teitelman, "The Magnificent McCoys: Running America's Best Bank," *Institutional Investor*, July 1991, pp. 47-56.

is the performance measure, banks in the strong performance group were typically acquired at slightly lower prices than weaker banks. When performance is measured by return on equity, a measure more reflective of stockholder interests, strong performers carry somewhat higher prices. These price differences, though, do not appear great enough to explain the differences in earnings between the strong and weak banks. Thus, the acquisition price data implies that weak performance generally is not being offset or explained by substantially lower acquisition prices. Many successful organizations, in fact, appear to be achieving their results without paying any more for acquisitions than others are paying.

The geographic distance between an acquisition and its new parent is another factor that could conceivably influence performance. A strategy of acquiring banks in close proximity to the parent organization may make expense control easier, facilitate more direct oversight of operations, and allow more centralization of back office operations. Also, closeness may help ensure that interstate organizations are more familiar with the markets and customers of the acquired banks, as well as many of the competing institutions. Overall, these factors would appear to explain much of the growth in regional banking organizations over the last decade and the development of regional interstate entry laws. In addition, several studies have found some support for this link between close proximity and better performance by acquired banks.11

On the other hand, closeness is no guarantee of success, and improvements in communications and the availability of information may allow distant operations to be conducted without significant problems. In addition, organizations that focus largely on nearby acquisitions and communities may greatly limit their opportunities for diversifying risk and for

Table 5

Distance of bank holding company's lead bank from acquired bank, by performance category

Acquisition	Performance	Profit measure			
year	category	ROAA	ROE		
		Average dista	ance in miles		
1986	Strong Weak	300 262	341 276		
1987	Strong	522	478		
	Weak	204	224		

finding the most attractive markets and acquisition candidates.

As shown in Table 5, an increase in the distance between an interstate acquisition and the lead bank of the parent organization does not appear to have had an adverse effect on performance. In fact, the acquired banks in the weak performance groups were actually located closer to the lead bank of their interstate parents than the strong performers. Thus, while the typical interstate acquisition was within several hundred miles of the parent organization and its lead bank, acquisitions at greater distances were not at a disadvantage and, on average, performed better.

Conclusion

A number of interstate acquisitions have established a strong, upward trend in performance, while others have suffered through a deterioration in earnings. If these acquisitions and their divergent paths are a useful guide, the following strategies and characteristics should be of interest to interstate organizations seeking a proven path to successful operations:

¹¹ Center for Banking Issues and Strategies, Analyzing Success and Failure in Banking Consolidation (Rolling Meadows, IL: Bank Administration Institute, 1990), pp. 40-44.

- Acquire banks that have a strong presence in their loan markets and work to maintain this position by pursuing moderate loan growth
- Continue to emphasize the traditional business and consumer lending roles of banks and be cautious about any shifts into higher-risk lending categories
- Establish high credit standards and do not sacrifice credit quality to expand the loan portfolio
- Stress earnings rather than asset growth—maintain net interest margins and improve but do not place too much reliance on noninterest income
- When possible, acquire banks that are already good at controlling expenses, and work towards lowering overhead through productivity improvements
- Do not assume that high acquisition prices and nearby acquisitions will guarantee success

In summary, these strategies and characteristics suggest that the most important factor in the success of an interstate acquisition will be an organization's management skills. The strong performing acquisitions in this study, for instance, could be characterized as having management that carefully followed a comprehensive set of strategies, while also demonstrating mastery of many critical banking skills. With interstate banking, moreover, an added challenge for management is to perform these tasks in new markets where previous experience and detailed insights into customers and competitors are limited.

Appendix: Analysis of the Profit Gap

The data presented in Table 3 show the changes in the four components of ROAA that served to distinguish strong from weak performers. Determining which of these four components contributed most to the differences in ROAA requires two steps. The first step is to calculate the differences in ROAA and its components between the strong and weak performance groups. The second step is to calculate the change in this difference or gap over the period covered by this study. Because this change in the ROAA gap will be equal to the sum of the corresponding changes for the four earnings components, these changes will provide a measure of the relative contribution of each component.

The following symbols and definitions will simplify presentation of the analysis:

AA= average assets

NII= net interest income

NonII= noninterest income

ROAA = return on average assets

OH= overhead

NOTH= net other income and expenses (taxes, extraordinary items, or provisions)

The equation given in the text can be written as

$$ROAA = (NII/AA) + (NonII/AA) - (OH/AA) + (NOTH/AA)$$

Let the subscript GAP serve as notation to indicate the difference between values for strong and weak performers during a particular year: 12

$$ROAA_{GAP} = (NII/AA)_{GAP} + (NonII/AA)_{GAP} - (OH/AA)_{GAP} + (NOTH/AA)_{GAP}$$

Table A shows the calculated gaps for ROAA and its components for the year before acquisition and for the final year of analysis, 1989. For example, average ROAA for the 1986 strong and weak performers was 1.02 and 0.96 percent, respectively, in the year before acquisition (Table 3), thus giving strong performers a profit advantage or "gap" of only 0.06 points (Table A). As shown in the first column of Table A, this gap reflects an advantage held by strong performers in net interest income relative to average assets (NII/AA) and overhead relative to average assets (OH/AA). The advantage was partially offset by a negative gap for noninterest income relative to average assets (NonII/AA). Both groups had the same level of net other income and expenses relative to average assets (NOTH/AA).

By 1989, the average difference or gap in profits between the 1986 strong and weak acquisition groups had widened to 1.38 percent of average assets, reflecting the advantage strong performers held in three of the four earnings components (Column 2 of Table A).

 $^{^{12}}$ If we let subscripts S and W denote strong and weak, then ROAA_{GAP} = ROAA_S - ROAA_W, (NII/AA)_{GAP} = (NII/AA)_S - (NII/AA)_W, and so on.

Appendix: Analysis of the Profit Gap (continued)

Since the difference in ROAA between strong and weak performers rose from 0.06 percent in the year before acquisition to 1.38 percent in 1989, the net change in this gap was 1.32 percentage points (Column 3 of Table A). 13 The single most important earnings component contributing to this change was net interest income relative to average assets, which was responsible for 0.60 of the 1.32 percentage point change in the ROAA gap. This was followed closely by overhead relative to average assets with a contribution of 0.56, and then by noninterest income relative to average assets (0.23 of the 1.32 percentage point change). The change in net other income and expenses had a small, but negative impact on the ROAA gap.

The right panel of Table A presents a similar analysis for the 1987 acquisition group. In the year before acquisition, strong performers had an ROAA that was only .05 percentage points higher than that for the weak performers, but this earnings gap rose to 1.03 percentage points by 1989. The change in the profit gap was thus 0.98 points. For the 1987 acquisitions, the single most important component in the earnings change was overhead relative to average assets, which provided 0.54 of the 0.98 percentage point change. Net interest income relative to average assets also contributed to the change in the profit gap (0.38 of the 0.98 percentage point change), but its contribution was somewhat smaller than that for the 1986 acquisition group. Noninterest income relative to average assets made a negative contribution to the change in the earnings gap (-0.03 compared to 0.98), thus indicating that weak performers actually closed the gap on this component. Net other income and expenses had a small positive effect on the change in the profit gap.

To summarize, the most important components in explaining the differences in ROAA trends for the strong and weak profit performers were net interest income and overhead. A somewhat distant third component was noninterest income. Consequently, key strategies in successful acquisitions would appear to be generating a good volume of earning assets, pricing loans and deposits appropriately, and controlling expenses.

In addition, a similar analysis was made using the values of ROAA and its components relative to peer banks. Net interest margin and overhead were again the most important factors in the change in the profit gap. Noninterest income also played a quantitatively important role for the 1986 acquisition group. The net other income and expenses component was small but not negligible in importance in this peer analysis. This component moved against the weak performers in both acquisition groups, most likely due to the asset quality problems these banks encountered and the resulting need for larger provisions for loan losses.

¹³ In mathematical terms, let the change of the ROAA gap be represented by \triangle ROAA_{GAP}, where

 $[\]Delta$ ROAA $_{GAP}$ = ROAA $_{GAP}^{1989}$ - ROAA $_{GAP}^{YBA}$. The superscripts refer to the period of the observation, either 1989 or the year before acquisition (YBA). Using similar notation for the components of ROAA, we can find

 $[\]triangle ROAA_{GAP} = \triangle NII/AA_{GAP} + \triangle NonII/AA_{GAP} - \triangle OH/AA_{GAP} + \triangle NOTH/AA_{GAP}$.

That is, the change of the ROAA gap is the sum of the change of each of the four components of ROAA.

Table A

Factors behind the profit differences between strong and weak performers

	1986 acquisitions			1987 acquisitions			
	Gap between strong and weak performers			Gap between strong and weak performers			
	Year before acquisition	1989	Change in gap	Year before acquisition	1989	Change in gap	
ROAA	.06%	1.38%	1.32%	.05%	1.03%	.98%	
Net interest income/ average assets	.03	.63	.60	.01	.39	.38	
Noninterest income/ average assets	07	.16	.23	.07	.04	03	
Overhead/average assets*	.11	.67	.56	.08	.62	.54	
Net other income and expense/average assets	.00	08	08	11	02	.09	

^{*} The strong performance groups had average values of overhead/average assets that were lower than that for the weak performance groups. The gap is reported as a positive number in this table because overhead is an expense item, and so the gap would have a positive contribution to ROAA.