ISSN 0428-1276

ECONOMIC COMMENTARY

Ohio Banks: Hitting the Interstate Acquisition Road

by Thomas M. Buynak and John N. McElravey

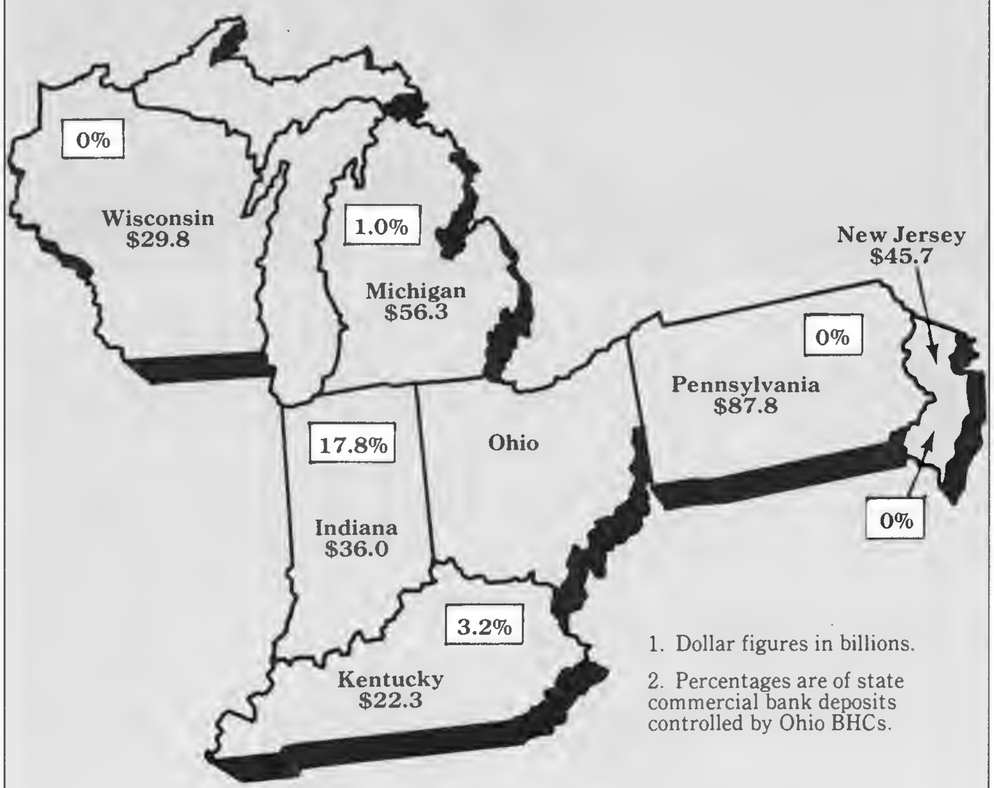
Changes in state banking laws have allowed interstate banking to spread rapidly throughout the United States during the past two years. As the process continues, and the geographic restraints on the banking industry fall away, there is increasing pressure for banks, particularly medium and large institutions, to move into new markets, and to compete on a regional, or even a national scale for retail deposits.

The pressure for expansion is being fueled in part by the threat of direct competition from, and possible acquisition by, money-center banks. If a regional banking organization can expand, and amass more assets while maintaining profitable operations, the probability of it being a takeover target of a money-center bank can be reduced.

In 1985, Ohio joined more than half the nation's states allowing out-of-state entry by commercial banking organizations. Shortly after Ohio's interstate banking law became effective in late 1985, the state's major banking organizations went on an interstate buying spree, purchasing 36 out-of-state banking organizations in Indiana, Kentucky, and Michigan by year-end 1986.

In this *Economic Commentary,* the interstate acquisitions of Ohio bank holding companies (BHCs) are examined. The interstate options presently available to Ohio banks are detailed, and the stages that Ohio banks will

Map 1 Ohio's Interstate Banking Region
(As of January 1, 1987)



SOURCES: Summary of Deposit Data (as of June 30, 1985); and Federal Reserve Bank of Cleveland.

Thomas M. Buynak is a vice president at McDonald & Company Securities, Inc. in Cleveland, Ohio, and a former staff economist at the Federal Reserve Bank of Cleveland. John N. McElravey is a research assistant at the Federal Reserve Bank of Cleveland. *The authors would like to thank Mark Sniderman, Henry Dickson, Gary Whalen, and Michael Pakko for helpful comments.*

Table 1 Financial Profile of Acquired and Unacquired Banks in Indiana, Kentucky, and Michigan
(As of December 31, 1985)

Financial Variables	Acquired Mean Value	Unacquired Mean Value
Total assets[a]	$291	$136
Profitability		
Return on assets	0.95%	0.83%
Return on equity	13.00%	8.90%
Net interest margin	3.63%[b]	3.90%[b]
Net loan charge-offs/total loans	0.47%	0.85%
Nonperforming loans/total loans	1.75%[b]	2.48%[b]
Total loans/total assets	51%	51%
Loan portfolio		
Consumer loans/total loans	31%[b]	26%[b]
Commercial & industrial loans/ total loans	22%	20%
Residential mortgages/total loans	27%	30%
Commercial mortgages/total loans	8%	9%
Deposit Structure		
Retail deposits/total deposits	79%[b]	82%[b]
Large CDs/total deposits	10%[b]	8%[b]
Other		
Capital/assets	7.31%[b]	8.39%[b]
Overhead expenses/total assets	2.89%	2.97%
Note: number of banks	35	1021

a. Dollars in millions.

b. A t-test with statistical significance at the 10 percent level found that these mean values were statistically different from zero.

SOURCE: Condition and Income Reports of Commercial Banks, Board of Governors of the Federal Reserve System.

pass through as the state moves toward unrestricted nationwide banking are identified. The premiums paid for the interstate acquirees by Ohio banking organizations are calculated, and the average interstate acquiree of Ohio banks is profiled. Finally, the acquirees' financial and market attributes are analyzed to determine what variables might be important in choosing an interstate target.[1]

Ohio's Interstate Banking Phases

When Ohio's interstate banking law became effective on October 17, 1985, only Kentucky had a reciprocal interstate banking law with Ohio. On January 1, 1986, Indiana and Michigan extended reciprocal interstate banking privileges to Ohio banks. This completed "Phase One" of Ohio's move towards interstate banking.[2] Ohio banks found themselves competing within a limited, contiguous-state region. In Phase One, Ohio's largest banks had a size advantage over the largest banks in Kentucky and Indiana, and had size parity with the larger Michigan banks.[3]

"Phase Two" began in late August 1986 when two mid-Atlantic states, Pennsylvania and New Jersey, extended reciprocal banking privileges to Ohio banks. Phase Two was completed on January 1, 1987, when Wisconsin's regional interstate banking law became effective, extending the region beyond contiguous states. In Phase Two, Ohio's largest banks maintain a size advantage over commercial banks in New Jersey and Wisconsin, but are at a size disadvantage as compared to Pennsylvania's largest banks.

Ohio's interstate banking law also extends reciprocal banking privileges to commercial banks and savings and loans in seven other states and the District of Columbia. The states include Missouri, Illinois, Tennessee, Virginia, Maryland, Delaware, and West Virginia. Ohio banking organizations presently can enter the District of Columbia under one of its two interstate banking laws if they pay an "entrance fee." This entrance fee requires Ohio banking organizations to invest in the district and to hire in part from the local work force. West Virginia's nationwide reciprocal law becomes effective on January 1, 1988. The remaining states listed in Ohio's interstate banking law have interstate laws presently excluding Ohio banking organizations.

"Phase Three" will begin October 17, 1988, when Ohio grants reciprocal entry on a nationwide basis. At that time, or shortly thereafter, Ohio banking organizations will legally be allowed to enter Washington, Louisiana, Nevada, West Virginia, New York, Oklahoma, Rhode Island, Utah, Texas, Maine, Arizona, Wyoming, Vermont, and Alaska. Ohio banks may enter California on January 1, 1991, when that state's nationwide trigger becomes effective.

The remaining states in the country, especially southeastern states such as Florida and Georgia, have chosen to exclude Ohio banks from their banking regions. Their legislation contains no trigger for nationwide banking. Consequently, full-service entry by Ohio banking organizations into southeastern states will be possible only if the states in question change their law, or if federal legislation is enacted to allow unrestricted nationwide banking.

The pattern of interstate acquisitions by Ohio banks reflect in part the timing of nationwide trigger dates. Regional banking organizations want to take advantage of the time before the trigger date to make their purchases without competition from banks in other regions. To illustrate, Ohio banking organizations may have entered Kentucky more quickly than they did other states because Kentucky's interstate banking law had a two-year trigger date. Ohio banks may try to accelerate their entry into New Jersey because recent events shifted New Jersey's nationwide trigger date from July 1, 1988 to January 1, 1988.

It is uncertain at the present time, however, how extensively Ohio banking organizations will leapfrog Pennsylvania and other geographically closer markets to compete in more-distant, less-familiar financial markets, such as New Jersey. Ohio acquirers might not enter New Jersey to any significant degree until they have exhausted attractive interstate targets closer to home.

Ohio BHC Acquisitions

From October 17, 1985 to December 31, 1986, Ohio banking organizations purchased 36 out-of-state, full-service commercial banking organizations.[4] In contrast, there were only five in-state multi-holding company acquisitions and mergers by all Ohio banking organizations in 1986. Two large Ohio banking organizations were particularly aggressive out-of-state buyers during Phase One of Ohio's interstate law, together accounting for 22 of the 36 out-of-state acquisitions.

During Phase One and the early stages of Phase Two, Ohio interstate acquirers were particularly aggressive buyers in Indiana, where they bought 24 banking organizations and now control almost 18 percent of the state's commercial bank deposit base. Ohio interstate acquirers were less aggressive in Kentucky and Michigan, purchasing seven and five banking organizations, respectively. Ohio banks have yet to purchase any banking organization in Pennsylvania or Wisconsin (see map 1).

So far, no existing Ohio bank has been acquired under the state's interstate banking law. The only full-service, out-of-state entry into Ohio is by a Pennsylvania banking organization that has agreed to provide the capital for a *de novo* bank.[5]

Premiums Paid By Ohio Acquirers

An acquirer's willingness to pay a *purchase premium* is directly related to the perception of how much the acquired entity will add to the acquirer's market value. The greater the perception of the value added by the acquiree, the higher the premium paid for it. In the case of an interstate bank acquisition, a premium will be paid based on the financial condition of the bank, and the competitive position it will give the acquirer in the new market. This study employs the conventional definition of a purchase premium, which is commonly expressed as the ratio of purchase price to book value of equity.

On average, Ohio BHCs paid moderately high prices for their interstate acquisitions, although there was a wide range of acquisition prices. On a price-to-equity basis, Ohio BHCs paid on average 183 percent for out-of-state acquirees (see table 1). The highest price to equity was 282 percent; the lowest was 95 percent. A survey of premiums paid for other midwestern interstate acquisitions indicates that the Ohio acquirers paid premiums close to the average for this part of the country. The average for the midwest region was 190 percent. This was low, however, compared to the average premium paid in the northeast (270 percent), and the southeast (260 percent).[6]

Financial Profile of the Average Acquiree

The financial characteristics of the acquirees were analyzed to develop a profile of the average interstate acquiree, and to determine the variables that are important in choosing an interstate acquisition. Twenty-nine of the acquirees were BHCs, and only three of the BHCs had more than one bank subsidiary. None of the acquired BHCs had any significant percentage of the holding company's assets in nonbanking activities (that is, mortgage banking, leasing, or consumer finance).[7] Conse-

1. There are only a few studies that analyze premiums paid on interstate acquisitions. For a related and more general study on acquisition premiums, see Stephen A. Rhoades, "Determinants of Premiums Paid in Bank Acquisitions," *Atlantic Economic Journal,* vol. XV, no. 1, March 1987, pp. 20-30.

2. The "Phase" terminology is that of the authors, and not that of Ohio's interstate banking law.

3. For a description of the commercial banking structure in these states, see Thomas M. Buynak, "Interstate Banking: Its Impact on Ohio Banks," *Economic Commentary,* Federal Reserve Bank of Cleveland, September 15, 1985.

4. It is important to understand that the only non-emergency (that is, not involving the interstate acquisition of a failed or failing bank) legal means to acquire a full-service interstate presence is through *a bank holding company,* because the Douglas Amendment to the Bank Holding Company Act of 1956 is the only legislation that presently allows banking organizations to acquire out-of-state banks. Under present banking law, neither the merger of two independent banks in different states, nor interstate branch banking, is legally permissible. See Thomas M. Buynak, et al., "Banking without Interstate Banking Barriers," *Economic Commentary,* Federal Reserve Bank of Cleveland, March 12, 1984.

5. See Mike Casey, "Pennsylvania firm to start Chardon bank," *Crain's Cleveland Business,* Feb. 16-22, 1987, pp. 1 and 19.

6. See Bart Fraust, "Some Banking Myths Shattered in '86," *American Banker,* January 20, 1987, pp. 1, 19-29, and 40.

quently, the analysis of the acquirees' financial characteristics uses data relating only to the commercial bank subsidiaries of the holding company.[8]

Three key financial aspects of the acquirees were analyzed: profitability, loan composition, and deposit structure. The acquired banking organizations in the sample were compared to the unacquired banking organizations in Indiana, Kentucky, and Michigan, to determine if the average interstate acquiree was any better than the average unacquired bank in these three states.

As reported in table 1, the average acquiree had reasonably good earnings, had a balanced loan portfolio, had a high percentage of total deposits as retail deposits, had low overhead expenses, and had conservative loan policies as reflected by high loan quality.

The profitability of the average acquiree (0.95 percent return on assets) was fairly high when viewed relative to the asset size of the average acquiree, which was $291 million. The average acquiree's asset size was more than twice that of the average unacquired bank ($136 million). The leveraging of the average acquiree, measured as a percentage of its assets that are loans, was low (51 percent), but equal to the loan-to-asset ratio of the average unacquired bank. The average acquiree, however, had a higher-quality loan portfolio as reflected by a lower percentage of loan charge-offs to total loans, and a lower percentage of total loans classified as nonperforming than did the average unacquired bank (see table 1).

The consequence of the moderate leveraging and conservative lending policies was a healthy, but lower-than-expected net interest margin for the average acquiree (3.63%). This was almost seven percent less than the average unacquired bank's net interest margin. The average acquiree's lower net interest margin seems to be offset, though, by the lower amount of net loan charge-offs. As a result, the

Table 2 Financial Profile of High-Premium and Low-Premium Interstate Acquisitions
(As of December 31, 1985)

Financial Variables	High-Premium Mean Value[a]	Low-Premium Mean Value[a]
Total assets[b]	$447	$160
Price to equity	236%	138%
Profitability		
Return on assets	0.98%	0.93%
Return on equity	14.13%[c]	12.06%[c]
Net interest margin	3.54%	3.71%
Net loan charge-offs/total loans	0.33%[c]	0.59%[c]
Nonperforming loans/total loans	1.36%[c]	2.08%[c]
Total loans/total assets	53%	50%
Loan portfolio		
Consumer loans/total loans	30%	33%
Commercial and industrial loans/ total loans	27%[c]	18%[c]
Residential mortgages/total loans	25%	30%
Commercial mortgages/total loans	8%	9%
Deposit structure		
Retail deposits/total deposits	79%	80%
Large CDs/total deposits	11%	9%
Other		
Capital/assets	6.92%[c]	7.64%[c]
Overhead expenses/total assets	2.94%	2.84%
Note: number of acquirees	16	19

a. High-premium acquisitions were those with price-to-equity greater than or equal to 175 percent. Low-premium acquirees were those with price-to-equity less than 175 percent.

b. Dollars in millions.

c. A t-test with statistical significance at the 10 percent level found that these mean values were statistically different from zero.

SOURCE: Condition and Income Reports of Commercial Banks, Board of Governors of the Federal Reserve System.

7. Each acquiree's nonbanking activities represented less than 1 percent of combined banking and nonbanking assets, except for one acquiree that had approximately 3 percent of its assets in nonbanking activities.

8. One small acquiree in Kentucky was deleted because it was purchased as a failed bank. The sample size is 35.

acquired and unacquired banks recorded similar returns on assets.

The average acquiree had a balanced loan portfolio that was tilted toward retail lending. Consumer loans represented almost one-third of the loan portfolio, and were a significantly larger percentage of total loans for the average acquiree than for the average unacquired bank. Commercial and industrial loans accounted for less than one-fourth of the average acquiree's total loans.

Ostensibly, interstate acquirers would more aggressively pursue interstate targets that had a stable, retail-oriented deposit structure. (Retail deposits include demand deposits, savings deposits, and small time deposits.) Thus, interstate acquirees with a high percentage of deposits held either as large-denomination certificates of deposit (deposits over $100,000), or as borrowed funds, would be less attractive interstate targets. The average acquiree had 79 percent of its total deposits as retail deposits and only 10 percent of its total deposits as large CDs.

As compared to the average unacquired bank, though, the average acquiree had slightly more large CDs, and slightly less retail deposits. This is not entirely unexpected given the size differences between the acquired and unacquired banks. The size difference also seems to account for the difference in capital ratios. Typically, smaller banks are better capitalized than larger banks (see table 1).

Table 3 Market Profile of Ohio BHC Interstate Bank Acquisitions

Market Variables	All Acquisitions[1] (mean values)	High Premium Acquisitions (mean values)	Low Premium Acquisitions[1] (mean values)
Rank	5.8	5.3	6.8
Market share	18.9%	18.3%	19.4%
Market deposits[2]	$ 1.4	$ 1.7	$ 1.5
Banking organizations	10.1	11.4	10.8
Three-firm concentration ratio	77.3%	78.7%	75.5%
Percent of state deposits	4.0%	4.8%	4.5%
Market share of thrifts	23.2%	24.8%	23.4%
Note: Number of markets	19	10	14

1. We excluded the case of one acquiree (market share 0.7 percent) located in the Detroit MSA (total market bank deposits $30.3 billion) because this market was completely unrepresentative of the typical market in this study.

2. Dollars in billions.

SOURCE: Summary of Deposit Data (as of June 30, 1985), FDIC.

High- Versus Low-Premium Acquirees

The sample is also divided into a high-premium group, and a low-premium group. This allows us to discern what financial or market attributes, if any, account for premium differences between the two acquiree groups. We caution that any inferences drawn from the high-premium and low-premium groups are tenuous because of the small sample size.

The division for the sample into high-premium and low-premium groups used a price-to-equity ratio of 175 percent. There are 16 acquirees in the high-premium group and 19 acquirees in the low-premium group; the prices paid for them were 236 percent price-to-equity, and 138 percent price-to-equity, respectively.

As evident from table 2, the two groups exhibit several similar financial attributes. The average low-premium and high-premium acquiree posted similar earnings performance, net interest margins, loan-to-asset ratios, deposit structure, overhead expenses, and percentage of total loans as consumer loans.[9]

However, there are important differences between the two groups that could explain in part why Ohio acquirers paid more for the high-premium acquirees. The average high-premium acquiree posted a higher return on equity, and had a significantly higher percentage of its loan portfolio as commercial and industrial loans. Also, the loan quality of the average high-premium acquiree was significantly better than the loan quality of the average low-premium acquiree. The average high-premium acquiree had lower loan charge-offs, and had a significantly lower percentage of total loans as nonperforming than did the average low-premium acquiree.

Characteristics of Acquirees' Markets

The 35 acquirees were located in 20 banking markets. For purposes of this study, a banking market was defined as the home county or metropolitan statistical area (MSA) of the acquired institution. Eight markets were single-counties, and 12 markets were MSAs. Twenty-five acquirees were located in MSAs. The most active markets for acquisitions by Ohio BHCs were the Indianapolis MSA (eight acquirees), and the Cincinnati MSA (six acquirees).

Kentucky entry by Ohio banks involved primarily cross-river purchases to extend presence to the Kentucky portion of the Cincinnati metropolitan area. The out-of-state acquisitions in Michigan gave Ohio BHCs a presence in metropolitan markets in the state's southern half. In Indiana, Ohio BHCs had the most geographically diversified market entry, entering metropolitan and rural markets throughout the state.

The average market of the acquirees had $1.4 billion in commercial bank deposits, which represented 4.0 percent of that state's total commercial bank deposits. The average market also had a high concentration of commercial bank deposits, as measured by a three-firm concentration ratio of 77 percent. Thrifts held less than one-fourth of combined commercial bank and thrift deposits.

The average acquiree held 18.9 percent of commercial bank deposits in the market, and it ranked, on average, sixth out of 10 organizations. In smaller out-of-state markets, Ohio BHCs were more likely to purchase banks with more dominant market positions. Of the 13 acquirees located in markets with less than $1 billion in commercial bank deposits, only one acquiree was ranked below the market's second-largest institution. The average market share of these 13 acquirees was 35 percent.

There were only minor differences between the market characteristics for the high-premium and low-premium acquiree groups. However, higher premiums were paid for acquirees that had more dominant market positions, and which were located in larger, more-concentrated markets (see table 3).

Concluding Remarks

Soon after Ohio's interstate banking law became effective in late 1985, Ohio BHCs actively pursued interstate acquisitions. No existing Ohio bank has been acquired by an out-of-state banking organization.

The average interstate acquiree purchased by Ohio BHCs was an above-average financial performer. Ohio acquirers paid moderately high premiums, but less than the premiums paid in other attractive interstate banking regions, such as the rapidly consolidating southeast. Ohio acquirers paid higher premiums for acquirees with higher quality loan portfolios, and a higher return on equity. Differences in return-on-assets, loan composition, and deposit structure did not seem to explain differences in premiums paid.

Ohio BHCs are targeting acquirees that are typically located in metropolitan markets (MSAs). In smaller metropolitan or rural markets, the acquisition target is usually among the market's dominant organizations, if not the market leader. In the larger metropolitan markets, Ohio BHCs are purchasing medium to large banks that are typically ranked in the top half of the market's organizations. Entry by Ohio BHCs into Kentucky and Michigan has been more limited geographically than their entry into Indiana.

The relatively high credit quality of the average acquiree should allow Ohio BHCs to rapidly integrate them into their existing organizations. This will permit them to take advantage of each "window of opportunity" in Ohio's three banking phases. As the trigger date for nationwide banking gets closer, some of Ohio's largest BHC's are on the brink of becoming "super-regional" banks—a size that they hope will allow them to compete directly with the nation's largest banks.

9. For a statistical model of interstate purchase premium, see Dave Phillis and Christine Pavel, "Interstate banking game plans: Implications for the Midwest," *Economic Perspectives,* Federal Reserve Bank of Chicago, March/April 1986, pp. 23-39.

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