

May 19, 1980

# ECONOMIC COMMENTARY

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# Market Share Gainers and Losers

by Paul R. Watro

Regulatory changes and financial innovations in recent years have fostered increased competition within the banking industry and, indeed, among all financial institutions. New payments powers extended to some thrift institutions permit third-party payment services, which formerly were the exclusive domain of commercial banks. Savings and loans, mutual savings banks, and credit unions compete directly or indirectly with commercial banks for transaction accounts through new services, such as negotiable order of withdrawal (NOW) accounts, share drafts, and remote service units. This more competitive environment has altered the rate at which deposits grow at individual financial institutions.

This *Economic Commentary* identifies and explains some factors that contributed to market deposit growth of individual banks during the 1970s. A group of banks whose share of total deposits in their market rose by 4 percent or more (termed *gainers*) are compared with a group of banks whose share of total deposits in their markets declined by 4 percent or more (termed *losers*).<sup>1</sup> Differences in behavior presumably would explain why some banks gained or lost a portion of their market share.

Although local economic conditions largely determine deposit growth for the market as a whole, bankers still can alter the share of deposits that their banks maintain. Whether banks gain or lose deposits relative to their competitors is likely to depend on many factors, including managerial decisions regarding the number of branches, office locations, rates paid on deposits, and lending policies. Suppose that total deposits of all banks in a given market area have increased by 10 percent, and deposits of a particular bank have experienced a similar gain. Bank growth may be viewed as only average, since the particular bank is merely keeping pace with other banks in the

market. However, if deposits of the particular bank have increased more than the deposits of competing banks, then that extra growth may be attributed to aggressive management.

## Market and Bank Characteristics of the Sample

A group of 120 Fourth District banks that gained or lost 4 percent or more of the total deposits in their local market areas between 1969 and 1977 were included in the sample for this analysis. Sixty-one of the banks were located in Ohio, 48 in Kentucky, and 11 in West Virginia; the total number included 56 gainers and 64 losers.<sup>2</sup> None of the banks selected was involved in a merger, and three out of every four gainers operated in the same market area as a loser.

While some banks compete for funds in regional, national, and international markets, most banks draw the vast majority of their deposits from their local, or immediately surrounding, area. Therefore, banking markets were defined along county lines to simplify the analysis and to permit utilization of county data. The banks in the sample were prohibited by branching laws from operating offices outside of their home county during the period examined.

The gainers and losers operated in 75 banking markets, or counties. These counties were generally less populated than counties without a gainer or loser (see table 1). In 1969, the markets served by gainers and losers had an average of 37,467 fewer residents; 11,820 fewer households; 7.5 fewer financial institutions; and \$181.7 million less in deposits. Although the population, number of households, and financial deposits grew at similar rates in markets both with and without gainers and losers, per-capita income increased at a significantly

1. The 4-percent criterion was selected because it reflected a trend in market-share changes and at the same time provided a large enough sample for reasonable statistical testing.
2. No Pennsylvania banks were included in the sample because of data limitations attributed to Pennsylvania's multi-county branching law.

**Table 1 Market Characteristics<sup>a</sup>**

	1969			Growth between 1969 and 1977, percent change		
	Markets with a gainer or loser	Markets without a gainer or loser	Difference	Markets with a gainer or loser	Markets without a gainer or loser	Difference
Population	62,638	100,105	-37,467	8.0%	8.3%	-0.3%
Households	18,960	30,780	-11,820	22.4	22.0	0.4
Per-capita income	\$2,914	\$2,803	\$111	104.2	114.1	-9.9 <sup>b</sup>
Financial institutions	14.2	21.7	-7.5	11.5	7.8	3.7
Banks	4.6	4.7	-0.1	-0.3	3.3	-3.6
Savings and loans	2.3	3.8	-1.5	24.1	15.6	8.5
Credit unions	7.3	13.2	-5.9	10.1	2.1	8.0
Financial deposits, millions of dollars	\$163.2	\$344.9	-\$181.7	135.0	132.6	2.4

a. Data are as of year-end 1969 and 1977, with the following exceptions: population figures are as of April 1970 and July 1977; savings and loans data are as of September 1968 and September 1977; credit union data are as of year-end 1972.

b. The difference is significant at the .10 level.

NOTES: The *t* test was used to determine statistical significance.

There were 75 markets with a gainer or loser and 75 markets without a gainer or loser.

SOURCES: *Survey of Buying Power*, Federal Home Loan Bank Board, *Credit Union Directory and Buyers Guide*, Federal Reserve Bank of Cleveland, and U.S. Bureau of the Census.

slower rate in the markets served by gainers and losers. In addition, the gainers' and losers' markets experienced more entry by thrift institutions, but these markets had a net reduction in the number of banks as a result of mergers and consolidations.

The institutional characteristics of the gainers differed from the losers in several important ways (see table 2). Gainers were significantly smaller than the losers, and a larger percentage of the gainers were state-chartered banks that were not members of the Federal Reserve System or a multi-bank holding company.<sup>3</sup> In 1969, the average gainer had deposits of \$14.8 million, while the average loser had deposits of \$40.7 million.<sup>4</sup> The average gainer also held a smaller share of market deposits in 1969. By year-end 1977, however, the market positions of the gainers and losers were reversed. The

average gainer increased its market share from 29.2 percent to 35.9 percent. In contrast, the average loser's market share fell from 39.3 percent to 32.9 percent.

### Competition

Competition among financial institutions is a complex, dynamic phenomenon. The number of institutions in a market affects the behavior and performance of market participants; a larger number of competitors can indicate more intense competition. Entry and exit also affect the competitiveness of institutions in an area over a period of time. New competitors are thought to lead sellers to provide both a higher level and a greater variety of services at lower prices in order to maintain their market positions. When another financial institution enters a market, the probability increases that an existing bank would lose a portion of its market share.

To estimate the degree of competition that gainers and losers encountered during the 1970s, the number of financial institutions (banks, savings and loans, and credit unions) was examined in 1970 and again in 1977 (see table 3). Changes in the number of

3. Kentucky and West Virginia currently do not permit the formation of multi-bank holding companies.

4. All the banks in the sample had total deposits under \$71 million in 1969, except for four Ohio banks with total deposits ranging from \$160 million to \$472 million. By eliminating these four banks, the average deposit size of the gainers and losers is greatly reduced (see table 2).

**Table 2 Characteristics of Gainers and Losers**

	1969			1977		
	Gainers	Losers	Difference	Gainers	Losers	Difference
Deposit size, millions of dollars	14.8	40.7	-25.9 <sup>b</sup>	42.9	71.0	-28.1
Excluding four largest banks <sup>a</sup>	11.8	21.5	-9.7 <sup>c</sup>	37.1	41.9	-4.8
Market rank of banks	2.3	1.7	0.6 <sup>c</sup>	1.8	2.0	-0.2
Market deposits, percent	29.2	39.3	-10.1 <sup>c</sup>	35.9	32.9	3.0
Charter, percent of state banks	69.6	48.4	21.2 <sup>b</sup>	69.6	48.4	21.2 <sup>b</sup>
Federal Reserve member banks, percent	41.1	68.8	-28.7 <sup>c</sup>	41.1	67.2	-28.2 <sup>c</sup>
Multi-bank holding company banks, percent <sup>d</sup>	3.2	7.4	-4.2 <sup>c</sup>	29.2	67.6	-38.4 <sup>c</sup>

a. The four largest banks (one gainer and three losers) were two to six times larger than any other bank in the sample.

b. The difference is significant at the .05 level.

c. The difference is significant at the .01 level.

d. Percentage refers to gainers and losers in Ohio only. Kentucky and West Virginia currently do not permit the formation of multi-bank holding companies.

NOTE: The t test was used to determine statistical significance.

SOURCE: Federal Reserve Bank of Cleveland.

competitors should reflect the competitive climate in the counties over the eight-year period. In addition, the number of financial institutions operating in the main-office communities of the gainers and losers should approximate the degree of direct competition that they faced. Banks typically transact the largest percentage of their business in the communities in which they are headquartered.

Losers faced a larger number of competitors than the gainers throughout the 1970s. In 1970, an average of 14.5 financial institutions operated in the market areas served by the losers, while an average of 11.0 financial institutions operated in the gainers' markets. Losers also had 3.9 more financial institutions operating in their main-office communities than the gainers. This structural differential was attributed to a disparity in the number of credit unions. Although credit unions are generally much smaller than banks and savings and loans, they have been a significant source of competition for many banks in product lines such as savings deposits and consumer loans.

Other things being equal, banks that do not provide quality services at competitive prices inadvertently encourage other institutions to enter their market areas. An

average of 1.4 new competitors entered the markets served by losers, compared with an average net increase of 0.4 in the gainers' markets. Thrift institutions accounted for nearly all of the entry. The average number of savings and loans increased significantly from 2.2 to 3.2 in the losers' markets, compared with an average increase from 2.2 to 2.6 in the gainers' markets. Over 80 percent of the savings and loan entry occurred in Ohio, where the option exists to establish branches in more than one county. In contrast, banks in Ohio, Kentucky, and West Virginia (and savings and loans in the latter two states) were prohibited from opening branches outside of their home-office county. Since the formation of new banks required large outlays of capital, very few new banks were established. In fact, the market areas served by gainers experienced a significant net reduction in the number of banks as a result of mergers and consolidations. While nominal capital requirements make it quite easy to start a credit union, relatively few were established in both the gainers' and losers' markets. As a result, the losers continued to compete with several more credit unions than the gainers throughout the 1970s.

While bank entry into new markets

**Table 3 Factors Affecting Market Share Changes**

	Gainers			Losers			Gainer change minus loser change
	1969	1977	Change	1969	1977	Change	
<b>Competition</b>							
Financial institutions in market	11.0	11.4	0.4 <sup>b</sup>	14.5	15.9	1.4 <sup>d</sup>	-1.0 <sup>d</sup>
Banks in market	4.5	4.2	-0.3 <sup>d</sup>	4.3	4.4	0.1	-0.4 <sup>c</sup>
Savings and loans in market	2.2	2.6	0.4 <sup>c</sup>	2.2	3.2	1.0 <sup>d</sup>	-0.6 <sup>c</sup>
Credit unions in market	4.3	4.6	0.3 <sup>c</sup>	7.8	8.3	0.5	-0.2
Financial institutions in main-office community	5.0	5.2	0.2 <sup>b</sup>	8.9	9.3	0.4	-0.2
Other banks in main-office community	1.4	1.4	0	1.3	1.6	0.3 <sup>d</sup>	-0.3 <sup>d</sup>
Savings and loans in main-office community	1.2	1.3	0.1	1.5	1.9	0.4 <sup>d</sup>	-0.3 <sup>b</sup>
Credit unions in main-office community	2.3	2.4	0.1	6.1	5.8	-0.3	0.4
<b>Branching</b>							
Number of branches	1.98	2.89	0.91 <sup>c</sup>	3.36	4.16	0.80	0.11
Excluding four largest banks <sup>e</sup>	1.82	2.67	0.85 <sup>d</sup>	2.48	3.02	0.54	0.31 <sup>b</sup>
Branches in new locations			0.43			0.25	0.18
Excluding four largest banks <sup>e</sup>			0.44			0.15	0.29 <sup>d</sup>
Percent of market offices	28.5	31.6	3.1	32.6	29.8	-2.8	5.9 <sup>d</sup>
<b>Interest rate on deposits</b>							
Interest on deposits/average time and savings deposits	4.00	5.71	1.71 <sup>c</sup>	4.01	5.52	1.51 <sup>d</sup>	0.20
<b>Lending activities</b>							
Loans/assets	.492	.545	.053 <sup>b</sup>	.470	.517	.047 <sup>d</sup>	.006
Commercial loans/loans	.119	.153	.034 <sup>b</sup>	.144	.159	.015	.019
Consumer installment loans/loans	.354	.384	.030	.316	.339	.022	.008

a. Unless otherwise indicated, data are as of year-end 1969 and 1977. All office data for banks and savings and loan institutions are as of June 30, 1970, and June 30, 1977. Credit union data are as of year-end 1972 and 1977.

b. The difference is significant at the .10 level.

c. The difference is significant at the .05 level.

d. The difference is significant at the .01 level.

e. The four largest banks were two to six times larger than any other bank in the sample.

NOTE: A paired *t* test was used to determine statistical significance.

SOURCES: Federal Deposit Insurance Corporation, *Credit Union Directory Buyers Guide*, *Directory of American Savings and Loan Associations*, and Federal Reserve Bank of Cleveland.

was limited, many banks opened branches in new communities. The losers presumably suffered from a significant amount of branch entry into their main-office communities by competing banks (0.3) as well as savings and loans (0.4). While this entry was offset to some degree by a reduction in the number of credit unions (0.3), more net entry by financial institutions took place in the main-office communities of the losers than the gainers.

### Branching and Location

Consumers choose a bank on the basis of many factors, including convenience of

branch location to their work, residence, or shopping areas. Banks, in turn, respond to consumer demand by increasing their branching activities.

Gainers were more aggressive in their efforts to expand, which was indicated by the increased investment in branch offices.<sup>5</sup> Despite being smaller banks, the gainers established more branches in the 1970s than the losers. As a result, the gainers increased the proportion of total offices

5. Although branching is prohibited in West Virginia, banks are permitted to operate a walk-in or drive-up facility within 2,000 feet of their offices. Such facilities are considered as branches in this study.

within their markets from 28.5 to 31.6 percent, while the percentage of offices operated by losers fell from 32.6 to 29.8 percent.

Branch location also affects the volume of business generated by banks. A branch established in a different community should attract more deposits than an additional office opened in the same community.<sup>6</sup> A bank that opens a branch in another community tends to increase the probability of generating new deposits as opposed to drawing existing deposits from its other offices. Gainers established nearly one-half of their new branches in communities where they previously did not operate any offices. In contrast, less than one-third of the losers' new offices were opened in new locations.

### Interest Rates on Deposits

The Federal Reserve System's Regulation Q restricts the ability of financial institutions to compete for time and savings deposits on the basis of interest rates. Financial institutions, however, have some flexibility in determining the mix of deposits and their effective rates. Generally, banks that pay the highest effective interest rates attract the greatest volume of deposits. Since specific rate information on various types of time and savings deposits was not available, the average interest rate paid on these deposits was calculated. While the two groups of banks paid approximately the same average rate in 1969, the gainers increased their average rate more than the losers in the 1970s. In 1977, the average rate paid on time and savings deposits was 5.71 percent for the losers, compared with 5.52 percent for the gainers.

### Lending Policies

Lending policies often indicate the aggressiveness of management. Given similar demand conditions, differences in loan-to-asset ratios and composition of loans should reflect the lending policies and the aggressiveness of bank management. Liberal lending policies tend to encourage deposit growth. Loan customers are likely to deposit their funds at the same financial institution that previously extended them credit. When banks

turn down loan applications, they run the risk of applicants withdrawing their funds and opening their accounts at other institutions. Loans made to businesses usually generate additional deposits immediately, because banks often require commercial borrowers to maintain a deposit balance.

Gainers allocated a larger proportion of their assets to loans and increased their lending more than losers between 1969 and 1977. In addition, gainers increased commercial lending relatively more than the losers. Although these differences were small, they were consistent with expectations.

### Summary and Conclusion

Many banks in Ohio, Kentucky, and West Virginia gained or lost 4 percent or more of their market share between 1969 and 1977. These banks were located in less populated markets that experienced more entry by thrift institutions. The deposit size of the gainers was significantly smaller than that of the losers, and a greater percentage of gainers were not members of the Federal Reserve System or a multi-bank holding company.

While many factors contributed to the success of the gainer, the two most important factors appeared to be a lower level of competition from thrift institutions and more aggressive management policies. Gainers competed with fewer credit unions, and the market areas and main-office communities of gainers also experienced significantly less entry by other banks and savings and loans. Gainers established a greater number of branches, with a greater portion in new communities. In addition, gainers tended to have higher average interest rates on deposits and more liberal lending policies than the losers.

The results of this analysis suggest that small and independent banks can compete effectively with larger banks and subsidiaries of multi-bank holding companies for a share of deposits in a local area by establishing additional offices and by aggressively providing better services. However, the competitive position of banks in local market areas seems to be affected by direct competition and entry of thrift institutions.

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6. The term *community* includes the area within the corporate limits of a city, village, or other municipality.

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The views stated herein are those of the author and not necessarily those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System.