The evidence presented herein indicates that the consolidation of the thrift industry, beginning in 1980 and expected to continue, may be desirable. The impact of this merger activity on state and local thrift concentration appears to have been slight and represents little cause for concern, given the continued decline in barriers to both intra- and inter-industry competition in the financial services field. Despite the large number of mergers, the net change in the number of institutions was small. Sixty-eight S&Ls have been absorbed overall. The thrifts that were absorbed generally merged with more efficient, profitable savings and loans, possessing greater expertise and resources. The acquiring institutions presumably will benefit from the acquisition of offices in new, attractive local markets or different portions of existing local markets. These combinations should result in stronger thrifts, better able to survive in the less regulated, more competitive, post-Monetary Control Act environment. Given the absence of adverse economic impacts, this merger activity appears to represent a partial, low-cost market solution to some of the industry's current problems.

Federal Reserve Bank of Cleveland
Research Department
P.O. Box 6387
Cleveland, OH 44101

Address correction requested
☐ Correct as shown
☐ Remove from mailing list

Please send mailing label to the Research Department,
Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, OH 44101.

Economic Commentary

Savings and Loan Mergers in 1980

by Gary Whalen

Merger activity among the nation's savings and loan associations increased dramatically in 1980 and accelerated in 1981. Persistently high and volatile interest rates in tandem with recession have placed severe pressure on the earnings of most liability-sensitive thrift institutions. Competition in the financial services industry has intensified since passage of the Depository Institutions Deregulation and Monetary Control Act of 1980—both among depository institutions and among these institutions and the less regulated nonbank financial intermediaries, such as money market mutual funds. Existing regulatory barriers to geographic and product market competition continue to fall and/or are being circumvented through financial innovation.

The management of many savings and loans (S&Ls) has taken the position that size is synonymous with the strength essential for survival in this highly competitive environment and that such strength can be most expeditiously attained through merger. Combinations may result in synergy if economies can be gained from complementary strengths or simply the elimination of duplicate facilities, equipment, or personnel. In particular, increased size may be a prerequisite for thrifts to tap money and capital-market funds on advantageous terms. This ability is essential, since cheap, core deposit funds are becoming increasingly scarce. Access to capital funds also influences the ability of thrifts to offer newly

Gary Whalen is an economist with the Federal Reserve Bank of Cleveland. The research assistance of June Genes is greatly appreciated.

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.

Federal Reserve Bank of Cleveland
November 16, 1981

ISSN 0428-1276

1. Thirty-nine mergers occurred in 1979, and 108 occurred in 1980. As of October 31, 1981, 168 savings and loan mergers were approved by the Federal Home Loan Bank Board for 1981; 17 mergers were still pending.
authorized financial services, which tend to be expensive and initially unprofitable. Access to funds also is necessary to finance data processing, electronic delivery systems, and the marketing effort now necessary for survival in the financial industry. Larger organizations can more readily afford the expertise essential for success in today's financial environment. For example, profitable financial intermediation in the future may enable thrifts to utilize the secondary mortgage markets, offer non-mortgage loans, and practice asset/liability management, including the use of financial futures. Merger also may provide the resulting organizations with relatively cost-effective branch networks that are essential to deliver retail services to consumers and to tap core deposits. This Economic Commentary discusses savings and loan merger activity during 1980, focusing on the geographic patterns of mergers and the characteristics of the merging institutions. Such examination provides valuable insights as to the impact of these consolidations on the structure of financial markets, the institutions involved, and the industry in general.

Geographic Patterns

According to Federal Home Loan Bank Board data, 143 voluntary merger applications were considered by regulatory authorities during 1980. This activity occurred in 38 different states, with the bulk concentrated in Pennsylvania (22 mergers), Ohio (19), California (16), Illinois (11), and Wisconsin (8). Mergers rates, a more accurate measure of merger activity, were highest in the District of Columbia (0.22), Idaho (0.15), Nebraska (0.11), California (0.09), and Pennsylvania (0.09).

The merger rates and variables indicating the nature of each state's financial environment were correlated to gain a better understanding of the factors affecting merger activity and its potential impact (see table 1). Merger activity was positively correlated with both the level and percent change in S&L deposit concentration. Assuming that market structure is primarily the result, rather than the determinant, of industry performance, these findings may reflect the attempt of the merging associations to gain economies of scale through consolidation. Alternatively, the positive correlation between the change in concentration and merger activity may reflect the attempt of thrifts to maintain their relative position in the size distribution in their respective states. These findings imply that merger-related structural changes may produce anti-competitive impacts. However, increases in statewide concentration during the year appear to have been slight. In any event, given the continued decline in regulatory and nonregulatory barriers to competition in the financial services industry, static concentration measures are becoming progressively poorer proxies of prevailing competitive conditions.

Mergers were found to be negatively correlated with both the level and percent change in the savings and loan share of bank and thrift total assets, a rough proxy of bank/thrift competition. This finding suggests that intense bank competition is a stimulus to S&L merger activity.

Merger activity was found to be negatively correlated with the percentage change in S&L total assets over the preceding year, a proxy for market conditions within a state. The results suggest that slower market growth stimulates merger activity. Merger activity also was found to be negatively correlated with 1980 de novo branching activity and positively related to 1979 merger activity. The first finding indicates that branching and expansion activity among S&Ls are substitutes rather than complements, presumably because of branching regulations. The second finding suggests that merger activity may produce the so-called "snowball effect." This result implies that this activity may continue in the future, even if current adverse economic conditions improve. The bulk of mergers occurred in urban S&L areas (see table 2), Merger activity occurred in 1980 in 49 different S&Ls, led by Philadelphia (9 mergers), Chicago (7), Washington, D.C. (6), Cincinnati (6), and Pittsburgh (5). The data in the table suggest that in at least 75 mergers (sum of the last four items) the acquiring institution obtained branches presumably well-located in other economically attractive portions of the same or different local markets.

Characteristics of Merging Institutions

Whether or not these combinations ultimately will produce advantages for the thrifts involved and the public at large depends on the characteristics of the merging institutions, such as their size and past performance. The acquiring institutions were typically larger than the acquired. In 30 percent of the cases, the acquiring institution had greater than $500 million in total assets; in 69 percent of the cases, the assets were greater than $100 million. In 41 mergers, the acquiring institution was one of the five largest thrift organizations in its respective state. Alternatively, in 31 percent of the mergers, the acquired institution had less than $10 million in total assets; in 48 percent of the cases, it had less than $25 million.

S&Ls prior to merger can be detected by similarities and differences in the performance characteristics of the merging institutions as such their size and past performance. The acquiring institutions were typically larger than the acquired. In 30 percent of the cases, the acquiring institution had greater than $500 million in total assets; in 69 percent of the cases, the assets were greater than $100 million. In 41 mergers, the acquiring institution was one of the five largest thrift organizations in its respective state. Alternatively, in 31 percent of the mergers, the acquired institution had less than $10 million in total assets; in 48 percent of the cases, it had less than $25 million.

S&Ls prior to merger can be detected by similarities and differences in the performance characteristics of the merging institutions as such their size and past performance. The acquiring institutions were typically larger than the acquired. In 30 percent of the cases, the acquiring institution had greater than $500 million in total assets; in 69 percent of the cases, the assets were greater than $100 million. In 41 mergers, the acquiring institution was one of the five largest thrift organizations in its respective state. Alternatively, in 31 percent of the mergers, the acquired institution had less than $10 million in total assets; in 48 percent of the cases, it had less than $25 million.
ties during 1980 but not approved by year-end. These were included in the analysis because thrifts involved and the public at large depend on the characteristics of the merging institutions, such as their size and past performance. The acquiring institutions were typically larger than the acquired. In 30 percent of the cases, the acquiring institution had greater than $500 million in total assets; in 69 percent of the cases, the assets were greater than $100 million. In 41 mergers, the acquiring institution was one of the five largest thrift organizations in its respective state. Alternatively, in 31 percent of the mergers, the acquired institution had less than $10 million in total assets. In 48 percent of the cases, it had less than $25 million.

6. All analysis in this section is based on a matched sample of 113 S&Ls for which complete data were available on both of the Federal Home Loan Bank Board 1979 semi-annual report of condition loans.
authorized financial services, which tend to be expensive and initially unprofitable. Access to funds also is necessary to finance data processing, electronic delivery systems, and the marketing effort now necessary for survival in the financial industry. Larger mergers can more readily afford the expertise essential for success in today's financial environment. For example, profit-able financial intermediation in the future may be possible only if thrifts can utilize the secondary mortgage markets, offer non-mortgage loans, and practice astute asset/liability management, including the use of financial futures. Merger also may provide the resulting organization with relatively cost-free well-located branches that are essential to deliver retail services to consumers and to tap core deposits. This Economic Commentary discusses savings and loan merger activity during 1980, focusing on the geographic patterns of mergers and the characteristics of the merging institutions. Such examination provides valuable insights as to the impact of these consolidations on the structure of financial markets, the institutions involved, and the industry in general.

**Geographic Patterns**

According to Federal Home Loan Bank Board data, 143 voluntary merger applications were considered by regulatory authorities during 1980. This activity occurred in 36 different states, with the bulk concentrated in Pennsylvania (22 mergers).

2. This figure includes 35 merger applications submitted during 1980 but not approved by year-end. Those were included in the analysis because thrift mergers that are denied application are less likely to reflect the characteristics of those approved.

3. The merger rates and variables indicating the nature of each state's financial environment were correlated to gain a better understanding of the forces affecting merger activity and its potential impact (see table 1). Merger activity was positively correlated with both the level and percent change in the savings and loan share of bank and thrift total assets, a proxy of bank/thrift competition. This finding suggests that intense bank competition is a stimulus to S&L merger activity.

4. Merger activity was found to be negatively correlated with both the level and percent change in the savings and loan share of bank and thrift total assets, a proxy of bank/thrift competition. This finding suggests that intense bank competition is a stimulus to S&L merger activity.

5. This activity occurred during 1980 but not approved by year-end. Those were included in the analysis because thrift mergers that are denied application are less likely to reflect the characteristics of those approved.

6. This finding suggests that intense bank competition is a stimulus to S&L merger activity.

7. The merger rates and variables indicating the nature of each state's financial environment were correlated to gain a better understanding of the forces affecting merger activity and its potential impact (see table 1). Merger activity was positively correlated with both the level and percent change in the savings and loan share of bank and thrift total assets, a proxy of bank/thrift competition. This finding suggests that intense bank competition is a stimulus to S&L merger activity.

8. The second finding suggests that merger activity may produce the so-called "snow-ball effect." This result implies that this activity may continue in the future, even if current adverse economic conditions improve. The bulk of mergers occurred in urban S&L areas (see table 2). Merger activity occurred in 49 different S&Ls, led by Philadelphia (9 mergers), Chicago (7), Washington, D.C. (6), Cincinnati (6), and Pittsburgh (5). The data in the table suggest that in at least 75 mergers of the last four items the acquiring institution obtained branches presumably well-located in other economically attractive portions of the same or different local markets.

**Characteristics of Merging Institutions**

Whether or not these combinations ultimately will produce advantages for the thrifts involved and the public at large depends on the characteristics of the merging institutions, such as their size and past performance. The acquiring institutions were typically larger than the acquired. In 30 percent of the mergers, both the acquiring and the acquired institutions had more than $500 million in assets. The acquiring institution had more than $500 million in assets in 49 percent of the cases, and the acquiring institution was one of the five largest thrift organizations in its respective state. Alternatively, in 31 percent of the mergers, the acquiring institution had less than $10 million in total assets in 36 percent of the cases, it had less than $25 million.

**Table 1 Merger Rate Correlations**

<table>
<thead>
<tr>
<th>State environment variables</th>
<th>Correlation coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five-fee S&amp;L concentration ratio, 1979</td>
<td>0.08</td>
</tr>
<tr>
<td>Percent change in consolidate, 1978-79</td>
<td>0.01</td>
</tr>
<tr>
<td>S&amp;L share of bank and thrift</td>
<td>0.12</td>
</tr>
<tr>
<td>Percent change in S&amp;L share</td>
<td>0.23</td>
</tr>
<tr>
<td>Percent change in total S&amp;L assets, 1978-79</td>
<td>0.29</td>
</tr>
<tr>
<td>Percent change in offices due to 1980 de novo branching</td>
<td>-0.15</td>
</tr>
<tr>
<td>Merger rate, 1979</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Ohio (19), California (16), Illinois (11), and Wisconsin (6). Merger rates, a more accurate measure of merger activity, were highest in the District of Columbia (0.22), Idaho (0.15), Nebraska (0.11), California (0.09), and Pennsylvania (0.09). The merger rates and variables indicating the nature of each state's financial environment were correlated to gain a better understanding of the forces affecting merger activity and its potential impact (see table 1). Merger activity was positively correlated with both the level and percent change in the savings and loan share of bank and thrift total assets, a proxy of bank/thrift competition. This finding suggests that intense bank competition is a stimulus to S&L merger activity.

**Table 2 SMSA Merger Patterns**

<table>
<thead>
<tr>
<th>Location of merging institutions</th>
<th>Number of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquiring headquartered in SMSA area</td>
<td>119</td>
</tr>
<tr>
<td>Acquiring headquartered in non-SMSA</td>
<td>25</td>
</tr>
<tr>
<td>Both headquartered in same SMSA</td>
<td>101</td>
</tr>
<tr>
<td>Both headquartered in different SMSA</td>
<td>27</td>
</tr>
<tr>
<td>Acquiring headquartered in same county</td>
<td>85</td>
</tr>
<tr>
<td>Acquiring headquartered in different county</td>
<td>27</td>
</tr>
</tbody>
</table>

**Table 3 Selected Performance Ratios of Merging Institutions**

<table>
<thead>
<tr>
<th>Location of merging institutions</th>
<th>Number of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquiring headquartered in SMSA area</td>
<td>119</td>
</tr>
<tr>
<td>Acquiring headquartered in non-SMSA</td>
<td>25</td>
</tr>
<tr>
<td>Both headquartered in same SMSA</td>
<td>101</td>
</tr>
<tr>
<td>Both headquartered in different SMSA</td>
<td>27</td>
</tr>
<tr>
<td>Acquiring headquartered in same county</td>
<td>85</td>
</tr>
<tr>
<td>Acquiring headquartered in different county</td>
<td>27</td>
</tr>
</tbody>
</table>

**Table 3 Selected Performance Ratios of Merging Institutions**

<table>
<thead>
<tr>
<th>Location of merging institutions</th>
<th>Number of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquiring headquartered in SMSA area</td>
<td>119</td>
</tr>
<tr>
<td>Acquiring headquartered in non-SMSA</td>
<td>25</td>
</tr>
<tr>
<td>Both headquartered in same SMSA</td>
<td>101</td>
</tr>
<tr>
<td>Both headquartered in different SMSA</td>
<td>27</td>
</tr>
<tr>
<td>Acquiring headquartered in same county</td>
<td>85</td>
</tr>
<tr>
<td>Acquiring headquartered in different county</td>
<td>27</td>
</tr>
</tbody>
</table>

**Characteristics of Merging Institutions**

Whether or not these combinations ultimately will produce advantages for the thrifts involved and the public at large depends on the characteristics of the merging institutions, such as their size and past performance. The acquiring institutions were typically larger than the acquired. In 30 percent of the mergers, both the acquiring and the acquired institutions had more than $500 million in assets. The acquiring institution had more than $500 million in assets in 49 percent of the cases, and the acquiring institution was one of the five largest thrift organizations in its respective state. Alternatively, in 31 percent of the mergers, the acquiring institution had less than $10 million in total assets, in 36 percent of the cases, it had less than $25 million.

**Savings and loan merger activity during 1980, focusing on the geographic patterns of mergers and the characteristics of the merging institutions. Such examination provides valuable insights as to the impact of these consolidations on the structure of financial markets, the institutions involved, and the industry in general.**
they also suggest that the acquiring thrifts findings imply higher interest expenses, to total deposits is lower. While these term debt are higher for the acquiring that of the acquired. Proportionately more acquired institutions; the last column table, while the second and third columns show the mean ratios of the acquiring and acquired institutions; the last column reports the relevant t-statistic.

Generally, the asset side of the acquiring institutions' balance sheets differs from that of the acquired. Proportionately more assets typically are invested in mortgage loans and insured mortgage loans relative to those of the acquired, although a significantly smaller proportion of those mortgages are for conventional single-family homes. These findings suggest that the mortgage portfolio of the typical acquiring institution is somewhat less risky than that of the thrifts absorbed. The finding with respect to ratio 12 (short mortgage loans relative to total assets) supports this view. However, acquiring institutions make significantly more non-mortgage loans than do those acquired, presumably because they possess the necessary expertise and resources. These loans are generally higher-yielding and riskier than mortgage loans. The ratio of liquid to total assets is significantly lower at acquiring institutions. This finding may indicate greater expertise in asset/liability management or reflect benefits of more extensive diversification.

Examination of the liability side of the balance sheet reveals further differences between the two classes of institutions. The acquiring S&Ls rely more heavily on those acquired on non-deposit sources of funds. Specifically, the mean ratios of short- and long-term advances, large-denomination CDs, and other short-term debt are higher for the acquiring institutions, while the ratio of passbook to total deposits is lower. While these findings imply higher interest expenses, they also suggest that the acquiring thrifts possess the ability to obtain funds in regional and/or national money and capital markets. This ability is becoming increasingly important as the phasing out of Regulation Q's limitations on deposit interest rates continues and core deposits continue to decline. The net worth ratios of the two classes of institutions are not significantly different.

The acquiring institutions were growing significantly faster than those acquired in the year prior to merger. This finding suggests that the acquirers may have been attempting to maintain their growth rates through merger, either because of a desire to maximize growth per se or perhaps to gain economies through increased scale.

Examination of the income statement ratios reveals that the acquiring institutions generated less gross income and mortgage income than those acquired. However, personnel expenses and total expense ratios were generally lower at the acquiring institutions, although the total interest expense ratio was higher as expected. Thus, the ratios of net income to total income (profit margin) and net income to total assets (return on assets) were higher at the acquiring thrifts. The implication is that the acquiring institutions were generally more efficient than those acquired.

The final ratio in the table reflects the extent of S&L involvement in secondary mortgage market activity. The mean ratio is significantly greater for the acquiring institutions, suggesting that those acquired generally gained increased access to secondary mortgage markets through merger. In addition, in roughly 5 percent of the mergers, acquiring institutions with no involvement in secondary mortgage markets merged with associations that were active in this area. These cases represent the mergers of thrifts with complementary strengths, which presumably will enhance the resulting institutions' chances of survival.

Summary and Conclusions

The evidence presented herein indicates that the consolidation of the thrift industry, beginning in 1980 and expected to continue, has already generated a significant proportion of new and continuing liquidity. The impact of this merger activity on state and local thrift concentration appears to have been slight and represents little cause for concern, given the continued decline in barriers to both intra- and inter-industry competition in the financial services field. Despite the large number of mergers, the net change in the number of existing S&Ls has been slight. Sixty-eight de novo institutions were chartered in 1980. The thrifts that were absorbed generally merged with more efficient, profitable savings and loans, possessing greater expertise and resources. The acquiring institutions presumably will benefit from the acquisition of offices in new, attractive local markets or different portions of existing markets. These combinations should result in stronger thrifts, better able to survive in the less regulated, more competitive, post-Monetary Control Act environment. Given the absence of adverse economic impacts, this merger activity appears to represent a partial, low-cost market solution to some of the industry's current problems.

Federal Reserve Bank of Cleveland
Research Department
P.O. Box 6387
Cleveland, OH 44101

Address correction requested
0 Correct as shown
0 Remove from mailing list

Please send mailing label to the Research Department,
Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, OH 44101.

Economic Commentary

Merger activity among the nation's savings and loan associations increased dramatically in 1980 and accelerated in 1981. Persistently high and volatile interest rates in tandem with recession have placed severe pressure on the earnings of most liability-sensitive thrift institutions. Competition in the financial services industry has intensified since the passage of the Depository Institutions Deregulation and Monetary Control Act of 1980—both among depository institutions and among these institutions and the less regulated nonbank financial intermediaries, such as money market mutual funds. Existing regulatory barriers to geographic and product market competition continue to fall and/or are being circumvented through financial innovation.

The management of many savings and loans (S&Ls) has taken the position that size is synonymous with the strength essential for survival in this highly competitive environment and that such strength can be most expeditiously attained through merger. Combinations may result in synergy if economies can be gained from complementary strengths or simply the elimination of duplicate facilities, equipment, or personnel. In particular, increased size may be a prerequisite for thrifts to tap money and capital-market funds on advantageous terms. This ability is essential, since cheap, core deposit funds are becoming increasingly scarce. Access to capital funds also influences the ability of thrifts to offer newly

Federal Reserve Bank of Cleveland
Research Department
P.O. Box 6387
Cleveland, OH 44101

Address correction requested
0 Correct as shown
0 Remove from mailing list

Please send mailing label to the Research Department,
Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, OH 44101.

Savings and Loan Mergers in 1980

by Gary Whalen

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.
Economic Commentary

Savings and Loan Mergers in 1980
by Gary Whalen

The management of many savings and loans (S&Ls) has taken the position that size is synonymous with the strength essential for survival in this highly competitive environment and that such strength can be most expeditiously attained through merger. The view, however, is that mergers may also create significant, long-term problems for the thrift industry and the nation's economy. The key issue is the extent to which the benefits of mergers may be offset by the associated costs to the thrifts involved, to the nation's economy, and to the consumer.

1. Thirty-nine mergers occurred in 1979, and 108 occurred in 1980. As of October 31, 1981, 168 savings and loan mergers were approved by the Federal Home Loan Bank Board for 1981; 17 mergers were still pending. 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.