

# Economic Commentary

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## 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.<sup>1</sup> 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

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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.*

1. Thirty-nine mergers occurred in 1979, and 108 occurred in 1980. As of October 31, 1981, 168 voluntary 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 require thrifts to 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 cheap, 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.<sup>2</sup> 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. These were included in the analysis because thrift mergers rarely are denied and because these mergers were presumably motivated by the same conditions influencing those completed during the year.

**Table 1 Merger Rate Correlations**

State environment variables	Correlation coefficients
Five-firm S&L concentration ratio, 1979	0.68
Percent change in concentration, 1978-79	0.10
S&L share of bank and thrift total assets	-0.12
Percent change in S&L share	-0.33
Percent change in total S&L assets, 1978-79	-0.29
Percent change in offices due to 1980 <i>de novo</i> branching	-0.15
Merger rate, 1979	0.52

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).<sup>3</sup>

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 S&L deposit concentration. Assuming that market structure is primarily the result, rather than the determinant, of industry performance, these findings may indicate the attempt of the merging associations to gain economies of size through consolidation. Alternatively, the positive correlation between the change in concentration and

3. *Merger rates* are the number of mergers that have occurred, divided by the number of S&Ls existing in 1979. This measure thus controls for the impact of the number of S&Ls operating in a state on the number of mergers.

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.<sup>4</sup> 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.

Merger rates 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 through merger 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

4. The average five-firm concentration ratio for the five states with the most mergers increased approximately 0.5 percentage point during 1980, to 24.1.

**Table 2 SMSA Merger Patterns**

Location of merging institutions	Number of cases
Acquiring headquartered in SMSA area	119
Acquired headquartered in SMSA area	101
Both headquartered in same SMSA	67
Both headquartered in same SMSA, same county	51
Both headquartered in same SMSA, different county	16
Both headquartered in dif- ferent SMSAs	27
Acquiring headquartered in SMSA, acquired in non-SMSA	25
Acquiring headquartered in non- SMSA, acquired in SMSA	7

activity may continue in the future, even if current adverse economic conditions improve.

The bulk of mergers occurred in urban SMSA areas (see table 2). Merger activity occurred in 49 different SMSAs, 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.<sup>5</sup>

### **Characteristics of Merging Institutions**

Whether or not these combinations ultimately will produce advantages for the

5. The impact on SMSA concentration also appears to have been slight. The average five-firm concentration ratio for these SMSA areas rose only 0.4 of 1 percent to 38.0.

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

Ratio	Acquiring mean	Acquired mean	t-Statistic
1. Mortgage loans/total assets	0.831	0.822	0.95
2. Insured mortgage loans/total assets	0.037	0.025	1.67**
3. Conventional single-family loans/ mortgage loans	0.701	0.777	-4.40**
4. Non-mortgage loans <sup>a</sup> /mortgage loans	0.024	0.016	2.25**
5. Liquid assets/total assets	0.067	0.077	-2.26**
6. Passbook deposits/total deposits	0.264	0.278	-1.04
7. Large CDs/total deposits	0.063	0.041	2.20**
8. Short-term advances/total assets	0.031	0.026	1.37*
9. Long-term advances/total assets	0.046	0.030	3.59**
10. Other short-term debt/ total assets	0.016	0.011	2.04**
11. Net worth/total assets	0.057	0.06	-1.05
12. Slow mortgage loans/total assets	0.0049	0.0061	-1.33*
13. Percent change, total assets, 1978-79	0.114	0.075	2.40**
14. Total income/total assets	0.086	0.088	-1.77**
15. Net income/total assets	0.0062	0.0056	1.55*
16. Net income/total income	0.071	0.063	1.61*
17. Mortgage income/mortgage loans	0.087	0.089	-3.19**
18. Personnel expenses/total income	0.072	0.085	-4.68**
19. Total interest expense/total income	0.760	0.729	3.76**
20. Total expenses/total income	0.929	0.937	-1.59*
21. Participations plus whole loans sold/ mortgage loans	0.098	0.066	1.82**

a. The sum of construction, mobile-home, and home-improvement loans.

\* Significant at the 10 percent level (one-tail test).

\*\* Significant at the 5 percent level (one-tail test).

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 those acquired. In 30 percent of the mergers, 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.

Similarities and differences in the performance characteristics of the merging S&Ls prior to merger can be detected by testing for differences in the means of balance-sheet and income-statement ratios of the two groups of institutions using the *t*-test (see table 3).<sup>6</sup> The mean ratios examined are listed in the first column of the

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 tapes.

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 (slow 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 than 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 phaseout 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 size.

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, 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

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 already penetrated 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.

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