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Thrift Resolution Activity:

Historical Overview and Implications

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Between 1980 and 1988, the Federal Home Loan Bank Board (FHLBB) resolved more than 900 troubled thrift institutions using a variety of techniques, including supervisory merger, assisted merger, liquidation, and stabilization. Of the 115 Texas resolutions, 81 were involved in transactions arranged as part of the Southwest Plan introduced by the FHLBB in 1988 to address the concentration of troubled thrifts in Texas.²

This article examines thrift resolutions completed during the 1980s and their implications for public policy. Evidence from the returns to the acquirers of failed thrifts during the 1980s indicates that the complex transactions negotiated by the FHLBB may have led to wealth transfers from both the Federal Savings and Loan Insurance Corporation (FSLIC) and the taxpayer to these acquirers.³ This evidence suggests that greater reliance on simple clean-bank and whole-bank transactions for resolving troubled institutions is preferable to the more complex transactions implemented by the FHLBB during the 1980s.⁴

During 1989, the Federal Deposit Insurance Corporation (FDIC) placed an additional 317 thrifts into conservatorship or receivership. These institutions held more than \$138 billion in assets. By the end of 1989, the Resolution Trust Corporation (RTC) had liquidated only thirty-seven of these thrifts. Inadequate resources slowed

the RTC's pace in resolving the remaining 280 institutions, forcing the RTC to raise additional working capital to expedite the resolution process.⁵

The large number of thrifts that are awaiting resolution pose a major challenge to the regulatory agencies responsible for implementing resolution activities. Beyond the intervened thrifts that have already been placed into conservatorship or receivership, the FDIC has targeted more than 200 thrifts with more than \$160 billion in assets for intervention during 1990. As many as 600

⁵ To resolve troubled thrifts, the RTC initially needs more funds than it will ultimately spend. For example, in a liquidation the RTC must pay off all insured liabilities of a failed thrift upfront, but it can recover some percentage of this payout as it disposes of the thrift's assets. Much of the RTC's initial \$20 billion allocation was used to replace high-cost brokered

¹ Cole (1990a) summarizes each of these resolution techniques.

² For a more complete assessment of the FHLBB's Southwest Plan, see Short and Gunther (1988).

³ See Cole and Eisenbeis (1989), Cole, Eisenbeis, and McKenzie (1989), and Balbier, Judd, and Lindahl (1989).

In a clean-bank deal, the insurer removes nonperforming assets from a failed depository's portfolio, replacing them with cash. This results in an essentially healthy institution that is then marketed. In a wholebank deal, the failed depository is marketed as is, with potential acquirers bidding on the lump-sum cash payment that they will receive from the insurer. In the 1980s, the FDIC has used clean- and whole-bank transactions extensively to settle failed banks. The strategic plan for the Resolution Trust Corporation also favors this approach. Clean- and whole-bank deals contrast with the typical FHLBB deals, as exemplified by its Southwest Plan transactions, which involved the acquisition of one or more institutions marketed as is, but with complex and open-ended FSLIC assistance. This assistance typically provided an intermediate- to long-term note to cover the institutions' negative net worth. It also provided guarantees against capital losses and guaranteed yields on nonperforming assets. In some cases, the capital-loss provisions called for loss sharing or other incentives for the acquirer to minimize actual losses and/or for the yield maintenance to taper down over time. While such assistance packages allowed both for the FSLIC to economize on cash and for asset disposition to be regionally dispersed and conducted by the private sector, they also were most difficult to accurately value.

additional thrifts may not meet the minimum capital standards mandated by the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA). These thrifts would face immediate restrictions on growth and dividend payments and could eventually face intervention.

To facilitate a better understanding of the pending thrift resolutions that will be implemented during the 1990s, it is important first to examine the thrift resolutions that were completed in the 1980s.

A Historical Overview of Thrift Resolution Activities in the 1980s

The thrift experience during the 1980s had two distinct phases. In the first phase, interest-rate spread problems caused by rising interest rates and the deregulation of deposit rates plagued the thrift industry. This combination left thrifts holding portfolios of mortgage assets that were earning substantially less than the interest cost of the deposit liabilities with which they were funded. In the second phase, asset quality problems caused by the FHLBB's policy of capital forbearance, deregulation, and asset

problems in this second phase were concentrated in the Southwest, especially in Texas.

Thrift resolution activities reflect the two phases of the thrift experience during the 1980s. Chart 1 presents thrift case resolutions by year and by type. In this chart, two waves of resolutions are visible. The first wave peaks in 1982 with 247 resolutions, while the second wave peaks in 1988 with 229 resolutions. During the intervening trough years of 1983–87, less than 100 resolutions occurred in any one year.

growth as solutions to the earlier spread problems plagued the thrift industry. In the

absence of deposit insurance reform, this

combination created strong incentives for

because the owners of a depository institu-

tion with near-zero or negative net worth

who are subject only to limited liability-

meaning that they can lose only the amount of their investment—have incentive to

undertake high-risk, high-return investments

in an attempt to return their institution to solvency.⁷ For a variety of reasons, including

the declines in oil and real estate prices,

thrifts to adopt go-for-broke strategies

The First Wave: Interest-Rate Spread Problems. In the first wave of resolutions, from 1980 to 1982, the FHLBB dealt with troubled institutions primarily by arranging supervisory mergers that entailed no explicit cost to the insurance fund. Supervisory mergers accounted for 181 of the 247 resolutions in 1982. In contrast, only one liquidation occurred in that year. Reliance on supervisory mergers allowed the FHLBB to conserve the dwindling liquidity of the FSLIC. The total cost of the 247 resolutions completed in 1982 was less than \$1 billion.

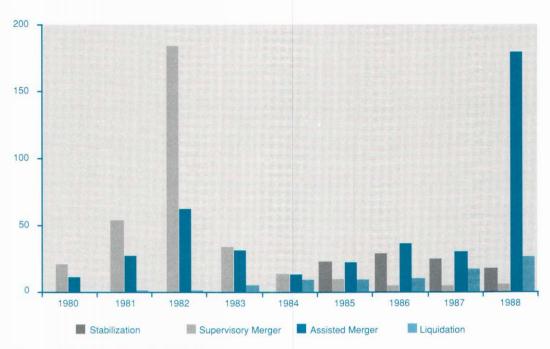
During this first wave, the FHLBB looked to regulatory forbearance and asset growth as substitutes for explicit assistance in attracting potential merger candidates. In effect, the FHLBB was anticipating that declining interest rates would eliminate the need for further action as institutions outgrew their spread problems. A fall in interest rates would appear on thrift balance sheets as an upward revaluation of *underwater*

deposits at conservatorship institutions to decrease the industry's cost of funds. FDIC Chairman William Seidman testified before the U.S. House Banking Committee that the RTC needed more than \$50 billion in working capital to resolve thrifts during 1990 and that the shortage of working capital had seriously delayed resolution efforts. In February 1990, the U.S. Justice Department approved a plan by which the RTC would borrow short-term working capital from the Federal Financing Bank, an arm of the U.S. Treasury. Initially, \$11 billion would be raised through the issuance of 90-day bonds at 12.5 basis points above the Treasury bill rate.

⁶ In addition to authorizing \$50 billion to close insolvent thrifts, FIRREA established a three-tiered capital adequacy test for all remaining institutions. As of December 7, 1989, thrifts must hold 1.5 percent tangible capital, 3 percent core capital, and 6.4 percent risk-based capital. Supervisory goodwill and purchased mortgage servicing rights may be counted toward as much as half of the core capital requirement. The risk-based capital requirement rises to 7.2 percent on December 31, 1990, and to 8 percent on December 31, 1992.

7 See Flannery (1982) for a discussion of this issue.

Chart 1 Thrift Case Resolutions, 1980–88 (Number of Resolutions)



Source: Federal Home Loan Bank Board

Table 1
Case Resolutions by Type and Year*

Year	Stabilization	Supervisory Merger	Assisted Merger	Liquidation	Total Closed	Total Insolvent
1980 1981 1982 1983 1984 1985 1986 1987	0 0 0 0 0 23 29 25	21 54 184 34 14 10 5	11 27 62 31 13 22 36	0 1 1 5 9 10	32 82 247 70 36 64* 80* 77*	48 85 237 293 445 470 471 515
1988 TOTAL	18 - 95	6 333	179 411	26 78	229* 917*	364

^{*} These figures overstate the true total number of resolutions because many institutions were stabilized before final resolution. Virtually all stabilizations have appeared or will appear again as mergers or liquidations. In addition, several resolutions from the early 1980s reappeared in the latter years.

Sources: Analysis and Evaluation Division, Management Consignment Program Division, and Financial Assistance Division of the FSLIC

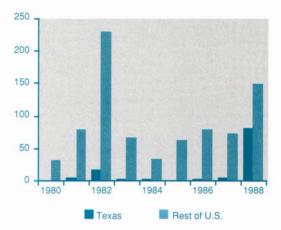
mortgage portfolios.⁸ Asset growth would allow a thrift to make new investments earning returns greater than deposit costs. Newer assets earning positive spreads would offset the effect of older assets earning negative spreads. Together, the revaluations and growth effects would pull formerly insolvent thrifts into the black.

Although interest rates did indeed decline, regulators had not foreseen the unintended side effect of regulatory forbearance on incentives for risk-taking. In an attempt to outgrow their spread problems, hundreds of thrifts moved into high-risk, high-return investments in which they lacked the expertise of their competitors.⁹ In so doing, they incurred huge credit risks that ultimately would swamp the beneficial effects of falling interest rates.

The Second Wave: Asset Quality Problems. The second wave of resolution activity came in the late 1980s. As Table 1 and Chart 1 show, resolutions rose from 64 thrifts in 1985 to 229 thrifts in 1988, and this second wave was characterized by the FHLBB's continuing policy of capital forbearance and increasing reliance upon assisted mergers. During 1988, the FHLBB engaged in 179 assisted mergers. Despite these efforts, 364 insolvent thrifts remained in operation at year-end.

Problems in this second wave were concentrated in the Southwest, and Table 2 and Charts 2–5 show how Texas resolutions compare to those in the rest of the nation. Chart 2 plots the number of case resolutions in Texas and the United States from 1980 to 1988. In 1983–87, only 13 of 327 resolutions

Chart 2
Thrift Case Resolutions, 1980–88
(Number of Resolutions)



Source: Federal Home Loan Bank Board

—less than 4 percent of the total—occurred in Texas. But, in 1988, 81 of the 229 resolutions—more than 35 percent of the total—occurred in Texas.

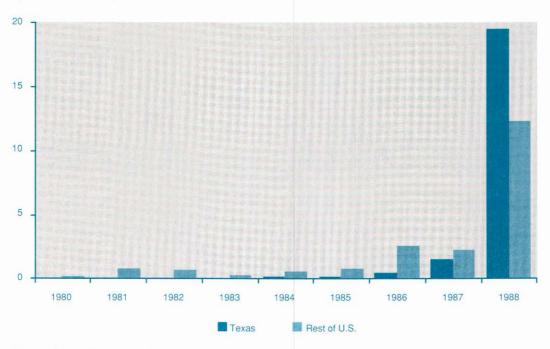
Chart 3 plots the cost of resolutions during 1980–88. From 1985 to 1988, Texas resolutions accounted for a growing fraction of the total U.S. cost. In 1988, Texas closures cost more than \$19 billion, nearly two-thirds of the \$32 billion national total. Nationally, resolution costs in 1988 were more than three times the spending for the entire 1980–87 period, which is strong evidence that forbearance was the FHLBB's preferred remedy during the 1980s.

Charts 4 and 5 identify thrift insolvencies by year for both Texas and the United States. Chart 4 shows the percentages of insolvent thrifts, while Chart 5 shows the actual number of insolvencies. The number of insolvencies, excluding resolutions, increased in each of these years, both in Texas and in the nation. In 1983, 7 percent of the 268 Texas thrifts were insolvent, while nationally 9 percent of the 3,146 thrifts were insolvent. Texas thrift insolvencies peaked at 56 percent in 1988. Nationally, insolvencies peaked in 1987 at 16 percent, declining in 1988 to 12 percent as a record 229 thrifts were resolved.

⁸ Underwater mortgages refer to mortgages whose market value is less than their face value because of a rise in interest rates since the time the mortgage was issued. Such discounts are not recognized on the books of thrifts.

⁹ Many spread cases rode out the interest-rate peaks of the early 1980s and returned to solvency and profitability in the falling-interest-rate environment of the mid-1980s. These thrifts primarily made traditional housingrelated investments rather than moving into more speculative commercial lending and direct investment activities. See Rudolph (1989).

Chart 3
Thrift Case Resolution Costs, 1980–88
(Billions of Dollars)



Source: Federal Home Loan Bank Board

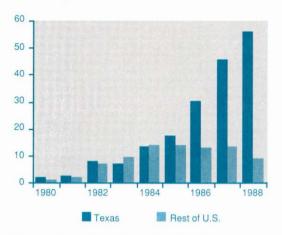
Table 2Assisted Case Resolutions in Texas and the United States*

Year	Texas Closed	Total Closed	Texas Cost (Billions o	Total Cost of dollars)	Texas Insolvent	Total Insolvent
1980	0	32	0.000	0.167	7	48
1981	4	82	0.001	0.759	8	85
1982	17	247	0.078	0.803	23	237
1983	3	70	0.000	0.275	19	293
1984	3	36	0.164	0.743	36	445
1985	1	64*	0.155	0.979	48	470
1986	2	80*	0.493	3.065	85	471
1987	4	77*	1.504	3.704	128	515
1988	81	229*	19.491	31.792	114	364
TOTAL	115	917*	21.886	42.286	-	_

^{*} These figures overstate the true total number of resolutions because many institutions were stabilized before final resolution. Virtually all stabilizations have appeared or will appear again as mergers or liquidations. In addition, several resolutions from the early 1980s reappeared in the latter years.

Sources: Analysis and Evaluation Division, Management Consignment Program Division, and Financial Assistance Division of the FSLIC

Chart 4
Percentage of Insolvent Thrifts, 1980–88

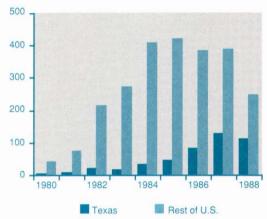


Source: Federal Home Loan Bank Board

In this second wave of thrift resolutions, supervisory mergers all but disappeared as healthy thrifts were increasingly unwilling to assume the burden of working out problem assets of an insolvent institution as a means of growth. As an alternative to supervisory mergers, the FHLBB began a strategy designed to stabilize insolvent thrifts by instituting its Management Consignment Program (MCP) in 1985. In an MCP action, the FHLBB placed an institution into conservatorship or receivership and usually replaced the thrift managers responsible for insolvency with managers of its own choosing. The FHLBB aimed this program at extinguishing shareholders' claims while conserving the institution's franchise value until a suitable merger partner could be found. This was the FHLBB's way of dealing with a shortage of reserves in the thrift deposit insurance fund. By placing institutions into the MCP, the FHLBB made progress in dealing with problem insolvencies while conserving the liquidity that remained in the FSLIC.

To deal with the regional concentration of troubled thrifts in Texas, the FHLBB instituted its Southwest Plan in 1988. As Charts 4 and 5 show, insolvencies in Texas in 1988 were more than five times the

Chart 5
Number of Insolvent Thrifts, 1980–88



Source: Federal Home Loan Bank Board

national average and represented nearly one-third of the national total. The Southwest Plan sought economies of scale by merging many small insolvent thrifts into larger entities that were then marketed to potential buyers. Consolidations were intended to lead to economies in operating costs through the elimination of redundant branches, making the packages more attractive to potential bidders. Overall, eighty-one Texas thrifts were closed in 1988 under the Southwest Plan at a cost of more than \$19 billion. But these actions were not sufficient to completely restore the thrift industry to financial health. As fast as the FHLBB completed transactions, new insolvencies occurred, and existing insolvencies grew more costly to resolve.

The FHLBB's Resolution Strategies.

Through both waves of resolutions, the FHLBB sought to merge insolvent thrifts with healthy institutions, either with or without FSLIC assistance. If a troubled thrift retained franchise value in excess of its negative net worth, then a merger was often accomplished at no explicit cost to the FSLIC in a supervisory merger. While supervisory mergers involved no explicit costs to the FSLIC, they always entailed implicit costs of regulatory forbearance,

including reduced capital requirements, waived interstate branching restrictions, and the potential for reemergence as a problem institution. A major point of contention over the recent implementation of stricter capital requirements for thrifts, some of which exclude supervisory goodwill, was the loss of forbearance. Acquiring institutions booked large amounts of goodwill in supervisory mergers and were allowed to count this goodwill toward regulatory capital. This type of forbearance saved the FSLIC the considerable cash outlays necessary to resolve these institutions by other methods.

When no supervisory merger partners could be found, the FHLBB was forced to grant assistance to the acquirer at a positive explicit cost to the thrift insurance fund in an *assisted* merger. In addition to implicit costs associated with supervisory mergers, assisted mergers also carried explicit costs, usually incurred in the form of cash or notes in the amount of the institution's negative net worth, indemnification for capital losses incurred on the sale of covered nonperforming assets, and yield subsidies on nonperforming assets to compensate acquirers for accepting a below-market return on these assets.

The open-ended nature of assisted mergers made them the most difficult type of resolution for the FSLIC to value. Many of the costs attributable to explicit assistance depended on future events. Lower-than-expected returns and disposition prices on covered assets have significantly increased the costs of the majority of FSLIC-assisted transactions. The resulting increase in assistance increased the acquirers' tax shelter. 12

Evidence on Abnormal Returns and Sources of Value in Thrift Resolutions

Congressional hearings on the thrift crisis focused new attention on how the FHLBB conducted case resolutions and how it structured FSLIC assistance packages. In a properly structured assistance agreement, the value of assistance provided would be sufficient to compensate the acquiring

institution for assumed risks, and thus would yield no wealth transfer from the deposit insurance fund to the acquirer. If, on the other hand, the assistance package overcompensated the acquirer, then wealth transfers from the deposit insurance fund to shareholders of the acquiring institution would occur. These transfers should be observable through abnormally large returns on the acquirers' publicly traded equities.

Evidence from several studies confirms the existence of such returns. ¹³ When FSLIC-assisted thrift mergers were publicly announced, they led to positive abnormal returns on the acquirers' stocks. When voluntary thrift mergers were announced, no such positive abnormal returns were observed. These findings suggest that the FHLBB overcompensated acquirers of failing thrifts.

While the abnormal returns were statistically significant, their economic significance is less certain. Abnormal returns observed in assisted mergers averaged about 2 percent of the acquiring firm's market value, which is small relative to the amounts of assistance granted. While wealth transfers appear to have occurred, they were not a very large

¹⁰ Franchise value refers to intangibles such as longterm customer relationships that are of value to financial institutions.

¹¹ Several thrifts have filed suit for breach of contract over this issue.

¹² All FSLIC assistance was exempt from federal taxation until 1989, when tax benefits were cut in half. Losses on the sale of nonperforming assets were deductible, even as FSLIC indemnification for such capital losses was tax-exempt. Hence, the tax shelter increased with the amount of assistance. For thrift acquirers only, accumulated net operating losses from the failing thrift could also be used for tax shelter. Both Kormendi, Pirrong, and Snyder (1989) and Cole, Eisenbeis, and McKenzie (1989) find evidence that the FSLIC did not adequately value these tax benefits as part of its assistance packages. This oversight may have biased case resolutions away from liquidations toward mergers by understating the full costs of these mergers. 13 Cole and Eisenbeis (1989), Cole, Eisenbeis, and McKenzie (1989), and Balbier, Judd, and Lindahl (1989) report such results.

part of the total resolution costs incurred in these transactions. ¹⁴

More interesting than the existence of positive abnormal returns are the potential sources of these returns. If abnormal returns can be attributed to the ways in which the FHLBB conducted case resolutions, then it may be possible to eliminate these sources of value in future resolutions by altering the methods used by the FHLBB. Hence, identification of the sources of value in past assisted acquisitions may lead to significant economies in the hundreds of resolutions that the RTC has yet to conduct.

Analysis of potential sources of abnormal returns in FSLIC-assisted mergers provides evidence that three factors—capital forbearance granted by regulators, underestimation of assistance costs by regulators, and superior information held by acquirers relative to regulators—led to positive abnormal returns and wealth transfers from the FSLIC and the Treasury to the thrift acquirers. 15 Other potential sources of value, including core deposits, relative size, and geographic diversification through interstate acquisitions, were also examined but were not found to be significant in explaining abnormal returns. Table 3 summarizes these findings.

In each assisted merger, the FHLBB granted regulatory capital forbearance to the acquiring thrift. Forbearance is most valuable to acquirers with low or negative net worth because it protects them from being seized by regulators for deficient capital. Evidence suggests that shareholders of acquirers with low or negative tangible net worth realized an increase in value from the regulatory capital forbearance that accompanied their firm's initial assisted acquisition.

In all of its deals, the FHLBB has been criticized for underestimating the true costs of the open-ended assistance granted to acquirers. If shareholders perceived that the

FHLBB was undervaluing the assistance packages, then abnormal returns should be positively related to the estimated value of FSLIC assistance.

To test two variants of this criticism, researchers examined both the ratio of assistance to acquired assets and the absolute amount of assistance as potential sources of value. If systematic underestimation of the assistance cost was a source of excess returns, then the assistance-to-assets ratio should be positively related to abnormal returns. As this ratio increased, so did the potential for measurement error. Hence, the larger this ratio is, the larger the potential abnormal returns become.

However, if measurement errors were small, but tax benefits to acquirers were not included in the assistance cost estimates, then abnormal returns should be positively related to the absolute amount of assistance. Abnormal returns would depend only on the tax benefits, which are proportional to the dollar value of assistance granted. Abnormal returns would not depend upon the size of the acquired firm. In this latter case, the acquirer would receive wealth transfers from the taxpayer rather than from the FSLIC insurance fund. Evidence supports only the latter criticism that the FHLBB did not adequately value the tax benefits granted to acquirers. This finding suggests that acquirers received wealth transfers from the taxpayer rather than from the FSLIC insurance fund.

Concerns were expressed that cash and personnel constraints placed the FHLBB at a disadvantage to acquirers in assessing the market value of assets held by troubled thrifts. Such asymmetric information could lead acquirers to ask for more assistance than necessary to compensate them for the risk involved in the acquisition. If successful, the acquirer would reap a wealth transfer from both the FSLIC insurance fund and the taxpayer. Results of the analysis strongly support this informational asymmetry hypothesis. Specifically, acquirers appear to have more accurately assessed the market value of the mortgage-backed securities

¹⁴ Abnormal returns also averaged about 2 percent of resolution costs, but with considerable variation.

¹⁵ See Cole, Eisenbeis, and McKenzie (1989).

Table 3Sources of Value in FSLIC-Assisted Acquisitions

Source of Value	Expected Sign	Actual Sign	Significance*
Capital Forbearance	+	+	< 10
Underestimation of Costs	+	+	< 5
Informational Asymetries	+	+	<.01
Interstate Merger	+	+	> 10
Core Deposits	+	+	> 10
Relative Size of Frims	_	_	> 10
1988 Deals	+	+	> 10

^{*}Probability (in percent) of rejecting the hypothesis that the variable in not a source of value when, in fact, it is not. Source: Cole, Eisenbeis, and McKenzie (1989).

held by the thrifts upon which they were bidding, and this superior information appears to have enabled them to reap windfall gains in these transactions.

In summary, analysis of voluntary and FSLIC-assisted thrift mergers reveals that acquirers earned positive abnormal returns from assisted transactions that were not present in voluntary mergers. Further analysis of potential sources of value in these assisted mergers shows that three factors—regulatory capital forbearance, underestimation of assistance costs, and superior information held by acquirers relative to the FSLIC-were significant in explaining the positive abnormal returns. These results have important policy implications for the FDIC, the RTC, and the Office of Thrift Supervision (OTS) as they continue to deal with the thrift crisis. FIRREA has appropriated funds for the RTC to begin case resolutions and has granted regulators important new tools in an attempt to prevent a recurrence of the systemic failures. Still, it is the FDIC, RTC, and OTS that must implement the actual cleanup. In the next section, the public policy implications of these findings are examined.

Policy Implications from FSLIC-Assisted Case Resolutions

To assess the policy implications from the evidence on FSLIC-assisted resolutions, one must remember the political and financial constraints under which they were conducted. The FHLBB had to regulate an industry whose market value was negative throughout the 1980s. It simply lacked the personnel resources to adequately monitor the troubled segment of the industry, and it lacked the monetary resources to close the insolvent segment of the industry. In this second-best world, the evidence that acquirers earned positive abnormal returns averaging 2 percent of their market value is not surprising. Under the circumstances, this is not an unduly large margin of error. However, the evidence on sources of the abnormal returns offers some guidance on how to make margins of error even narrower in future case resolutions.

Regulatory forbearance provides positive abnormal returns to acquirers, which is consistent with other work on forbearance demonstrating that resolution costs increased if a thrift continued to operate while insolvent. To stanch the financial hemorphaging of insolvent depository institutions, regulators should follow a policy of prompt closure for undercapitalized institutions. Unfortunately, as both the FHLBB and the RTC have found, liquidity constraints may force regulators to delay resolution actions until Congress can provide adequate funding.

¹⁶ Cole (1990b) reports that the 769 failed thrifts he examined were insolvent, on average, for more than three years, and that the length of insolvency was statistically significant in explaining resolution costs.

The positive influence of the dollar value of FSLIC assistance provides evidence that the FSLIC underestimated the true value of the tax breaks it was granting to acquirers. This finding suggests that the use of tax breaks to augment assistance packages is inefficient; therefore, future resolutions should be explicitly funded from deposit insurance reserves.

Strong evidence exists of informational asymmetries between regulators and acquirers. Regulators should explore ways to improve their informational endowment. Performance of due diligence reviews on all failed institutions before marketing is one avenue by which to remedy this informational problem. Assistance cost savings from information thus acquired should easily offset the costs of the reviews.

Taken as a whole, the evidence suggests that future case resolutions should follow the FDIC's lead in moving away from complex deals involving open-ended assistance and moving toward simpler cleanbank and whole-bank deals, where bidders ask for a one-time lump sum payment from the insurance fund in exchange for taking over a troubled thrift. Once the regulator has performed a due diligence review and marked assets to market value, there is much less chance for underestimating the ultimate costs of cash assistance. By reducing the potential for underestimation of the cost of assistance, regulators can ultimately reduce the actual assistance costs.

The advantages of clean- and wholebank transactions derive from the simplicity in estimating the costs to the deposit insurance fund. Bidders calculate how large of a single payment they would require to take over the troubled thrift. Hence, regulators can readily compare the impact of alternative bids on the deposit insurance fund. In contrast, estimation of the costs of a transaction involving open-ended assistance are subject to large errors because of the long-term nature of the assistance and the uncertain value of the covered assets and the tax shelter granted to the acquirer. If interest rates or asset market conditions change from those assumed in the costing scenarios, the ultimate costs to the insurance fund can vary greatly from the assumed costs.

These results also suggest that the RTC should investigate the possibility of exercising call options on covered assets included in past deals. ¹⁷ The FHLBB wrote into many deals options that allow the government to buy back covered assets at book value. Such buybacks hold the promise of considerable cost savings for deals where guaranteed yields on nonperforming assets are above the RTC's cost of funds.

Conclusions

This historical overview of thrift resolutions in the 1980s may show how to reduce the costs of resolutions in the 1990s. As an unprecedented number of institutions are to be dealt with in a short time, evidence from FSLIC case resolutions offers the following insights.

Costs may be reduced by striving to eliminate potential informational asymmetries between regulators and potential acquirers through the collection of asset-specific information on the market values of thrifts that are to be resolved. To accomplish this, more resources may need to be directed at current thrift resolution efforts to ensure that cash and personnel constraints do not hinder these efforts.

Furthermore, the structure of assistance agreements has a major effect on resolution costs. The use of implicit assistance such as capital forbearance and tax benefits as substitutes for explicit assistance payments appears to be less efficient than direct cash assistance because implicit assistance is more difficult to value.

Based on the experience in the 1980s, the resolution policies of the FDIC and RTC

¹⁷ FIRREA explicitly requires regulators to reexamine all 1988 FSLIC-assisted transactions to identify if cost savings could be achieved by renegotiating the deals.

appear preferable to those of the FSLIC. Simple whole-bank and clean-bank transactions decrease resolution costs relative to the more complex mergers involving openended assistance by reducing the potential for underestimating the final dollar cost of the assistance. Despite this advantage, even these simply structured assisted resolutions may not adequately account for the com-

petitive impact that the newly created institutions have on their nonintervened competitors, banks and thrifts alike. Because of the large number of thrift institutions that will require resolution during the next few years, the unassisted competitors of the resolved institutions will grow more concerned with this issue, meriting additional study of this subject.

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In the three decades preceding the 1980s, a bank failure was a relatively rare event. The number of banking institutions that failed averaged about six per year from 1950 through 1979. This tranquil period came to an abrupt end in the 1980s. Bank failures in the United States increased from 10 in 1980 to more than 200 in 1989. An even bleaker picture emerged in the Eleventh District of the Federal Reserve System, where District bank failures rose from zero in 1980 to 144 in 1989. More important, as a percentage of total U.S. failures, Eleventh District bank failures climbed steadily from zero percent at the beginning of the decade to 70 percent in 1989. The increase in failures in the savings and loan industry reflects an even more dramatic pattern.

The unprecedented number of financial institution failures, both in the nation and in the District, necessitated increasingly costly outlays by the various federal agencies responsible for insuring deposits. As the burden on insurance funds grew, innovative ways to deal with financial-sector distress emerged. Innovations ranged from new settlement practices implemented by the Federal Deposit Insurance Corporation (FDIC), to the Federal Home Loan Bank Board's Southwest Plan, to the Financial Institutions Reform, Recovery and Enforcement Act of 1989. The 1989 legislation

resulted in a major restructuring of the regulatory framework for thrifts, eliminated the Federal Savings and Loan Insurance Corporation (FSLIC), and placed responsibility for insuring the deposits of both banks and thrifts under the FDIC.

To help prevent future difficulties, the causes of current financial distress need to be identified. Those factors that led to the problems plaguing financial institutions in the Eleventh District can be viewed as a microcosm of those factors that have afflicted intermediaries throughout the nation. A confluence of elements-economic, regulatory, and managerial-lies behind the deterioration of financial institutions both in the District and across the nation. Because the same factors, albeit in more concentrated dimensions, lie behind both national and Eleventh District financial troubles, the District's experience can shed light on how best to achieve a smooth transition to the new financial environment that is evolving nationwide.

Background

Financial intermediaries are *middlemen* in financial markets. Banks, savings and loan associations, credit unions, and other types of intermediaries channel the surplus funds of savers to the most productive use by investors. These financial intermediaries, in effect, transform their demand deposits—or short-term liabilities received from depositors—into longer-term, less liquid and higher-yielding assets, mainly in the form of loans. This transformation encourages saving, stimulates investment, and promotes economic growth by reducing the cost of credit.

Traditionally, banks provided most financial intermediation services, and they did so within a prescribed set of regulations. Much of the current banking regulatory framework originated in the aftermath of the Great Depression. Particularly, the Banking Act of 1933 shaped much of the regulatory structure of banking for the next fifty years. The Banking Act of 1933, also known as the Glass–Steagall Act, separated

commercial and investment banking, prohibited payment of interest on demand deposits, and regulated the amount of interest payable on time and savings deposits. In addition, the Glass–Steagall Act established the FDIC. One year later, Congress created the FSLIC under the jurisdiction of the Federal Home Loan Bank Board.

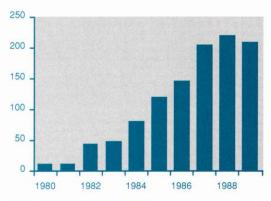
Federal deposit insurance helped restore confidence in U.S. depository institutions. Congress created both the FDIC and the FSLIC as part of an overall legislative package designed to regulate bank risk-taking and ensure the safety and soundness of the financial system. Banks were limited primarily to accepting deposits and making loans, while thrifts dealt mainly with the provision of home mortgage credit. In short, intermediaries generally conducted business in their home states or counties and paid interest on deposits no higher than allowed by federally authorized ceilings.

This institutional framework performed fairly well throughout most of the period following the Great Depression. Except for episodes of severe economic distress, misuse of banking resources by inept or corrupt managers caused most post-Depression bank failures. By the mid-1970s, however, the financial sector was in the early stages of a major restructuring. Traditional financial intermediaries faced increasing competition from new providers of financial services. In addition, with the emergence of the Euromarkets, capital markets worldwide became increasingly integrated.

Along with these changes in the financial framework, several large banks failed or required special assistance to continue operations. Troubled banks included U.S. National Bank of San Diego (1973), Franklin National Bank (1974), Penn Square Bank (1982), Seattle–First National Bank (1983), and Continental Illinois National Bank

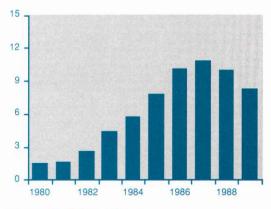
(1984). Moreover, thrift institutions, which primarily hold large amounts of long-term, fixed-rate mortgages, suffered large declines in net worth. The sharp run-up in interest rates that began in the late 1970s hit thrifts particularly hard. By the early 1980s, the financial environment clearly was in a state of flux as the number of bank failures began to rise steadily (Chart 1). A sign of further instability is revealed in Chart 2, which shows the percentage of banks that the FDIC labeled as problems.

Chart 1 U.S. Bank Failures



Source: FDIC Annual Reports

Chart 2
FDIC Problem Banks as a Percentage of Total Insured Banks
(Percent)



Source: FDIC Annual Reports

¹ For a discussion of the problems in the thrift industry, see Cole (1990).

District Financial Distress

Recent attention has focused on the severe problems of Eleventh District financial institutions, banks and thrifts alike. Return on average assets of District commercial banks turned negative in 1986 and stood at –0.28 percent at the end of 1989. For banks in the rest of the United States, average return on assets was 0.5 percent in 1989. The District thrift industry suffered even more severe losses. More than one-half of all Texas thrifts were insolvent at the end of 1988. As of the third quarter of 1989, only one-fourth of the thrifts in the Eleventh District of the Federal Reserve System were both profitable and solvent.

No single cause can be identified for the troubles experienced by Eleventh District financial institutions in the last few years. Rather, events seem to have resulted from a combination of forces that precipitated an adverse financial climate. Economic, regulatory, and managerial factors played a role, although the specific impact of each factor is difficult to distinguish and may vary across regions and institutions. But a growing consensus of opinion maintains that the same interrelated forces that created difficulties in the Eleventh District are emerging at financial intermediaries nationwide.

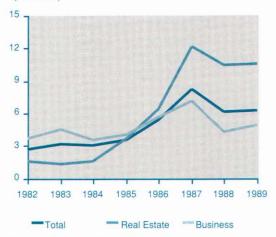
Economic Factors. Several volatile economic factors had a negative impact on financial intermediaries both in the region and nationally during the past decade. As inflation accelerated in the 1970s, binding interest-rate ceilings on deposits made banks and thrifts nationwide increasingly vulnerable to deposit outflows. Inflationinduced increases in market interest rates spawned substitutes for regulated deposit accounts, principally in the form of mutual funds. As a result, traditional intermediaries began to face increased competition in the provision of financial services. In addition, financial institutions holding a significant amount of long-term mortgages suffered a sharp deterioration in the market value of their asset portfolios. Finally, adverse

economic conditions in a number of developing countries appear to have had a negative impact on the performance of banks with a significant amount of outstanding debt from lesser developed countries, while depressed commodity prices led to a record number of bank failures in the Farm Belt.²

Locally, the oil-price shock of the mid-1980s plunged the Eleventh District economies into a prolonged slump. The deterioration in economic activity precipitated asset-quality problems at a number of District financial institutions. Chart 3 tracks the increase in average nonperforming loan rates for selected loan categories of Eleventh District banks. Real estate loans presented the most difficulties for banks, but they were preceded by problems with business loans. Chart 4 shows the upward trend of nonperforming loans recorded since the mid-1980s for Texas thrifts.

As asset-quality problems increased, financial institutions in the Eleventh District began to experience a depletion in their

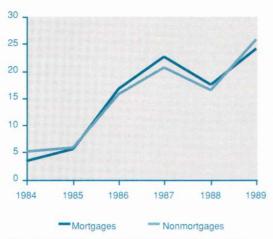
Chart 3
Nonperforming Loan Rates for Eleventh District Banks (Percent)



Source: Report of Condition and Income

² See Kane (1985), Sachs and Huizinga (1987), and Carron (1988).

Chart 4
Nonperforming Loan Rates for Texas Thrifts (Percent)



Source: Thrift Financial Report, Federal Home Loan Bank Board

equity capital. Chart 5 indicates that equity capital of banks, measured as a percent of assets, declined from about 7 percent at the beginning of the decade to less than 5 percent at the end of 1989. Texas thrift institutions suffered a much larger decline in their net worth position, as shown in Chart 6. Encouragingly, many difficulties in the Eleventh District appear to have abated. Problems at the largest institutions have been identified and steps toward solutions have begun. Some improvement in the nonperforming loan rate at Eleventh District banks is evident in data for the past two years. However, the current rate of total nonperforming loans is still above that recorded in 1985, the last year in which Texas banks overall reported positive net income.

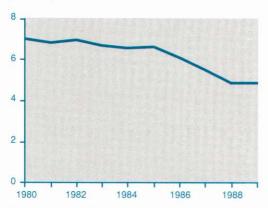
Regulatory Factors. The changing economic climate provided the impetus for both de facto and de jure deregulation of the financial services industry that characterized the 1980s. A diverse group of parties pushed for changes in the regulation of the financial system, including the federal government, regulatory agencies, financial institutions themselves, and consumer groups.

Interest rate ceilings on deposits were gradually eliminated beginning in the late 1970s in response to the disintermediation brought about by these ceilings. This deregulatory process reached its peak in the early 1980s with the passage of the Depository Institutions Deregulation and Monetary Control Act of 1980 and the Garn-St Germain Depository Institutions Act of 1982. One consequence of these regulatory changes is that financial intermediaries nationwide are becoming more and more alike in their provision of financial services. Deregulation in the 1980s freed both banks and thrifts to engage in new activities and to enter ventures that previously were off limits to them.

Deregulation also phased out interest rate ceilings on most deposit accounts and broadened the asset and liability powers of a number of financial institutions. New legislation also authorized savings and loans to expand their consumer loan business and to issue credit cards, eliminated the effects of state usury laws on certain types of loans, and empowered all depository institutions to pay interest on checkable deposits. Entry restrictions were relaxed, which contributed to increased competition among various types of depository institutions. At the same time, the scope of federal guarantees of deposits was increased substantially. In contrast to the movement toward a more deregulated environment, federal deposit insurance coverage was extended to accounts of up to \$100,000, from a maximum of \$40,000.3 In the Eleventh District, a deteriorating economy in a more deregulated financial environment, coupled with an increase in federal deposit insurance, set the stage for managerial decision-making that followed.

Managerial Factors. The managerial factors that contributed to financial-sector problems of the 1980s resulted from a regulatory-incentive structure that motivates managers of insured institutions to assume added risk. A recent analysis of the difficulties troubling Texas banks indicated that the sharp decline in oil prices initiated the

Chart 5
Equity to Assets Ratio for Eleventh District Banks (Percent)



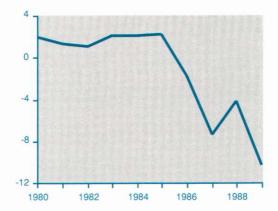
Source: Report of Condition and Income

Texas banking problems, but risk-taking also contributed substantially to the severity of the financial losses. Banks that adopted relatively risky management strategies in the form of both high reliance on commercial and industrial loans and construction loans, and greater use of large certificates of deposit for funding, suffered much greater difficulties than did their more conservative counterparts. Aggressively managed banks experienced sharper increases in their average troubled asset ratios and suffered a much sharper decline in their equity positions than did their more conservative counterparts.⁴

Economic theory predicts that it is not coincidental for a structural change in the regulatory framework, coupled with a deteriorating economic environment, to be followed by a decade of the worst banking and thrift performance since the 1930s. The existing regulatory-incentive structure encourages excessive risk-taking on the part of managers of financial institutions. When this structure is combined with a deteriorating economic climate, financial distress is likely to follow.

The risk-taking incentives inherent in the current regulatory framework stem from the *moral hazard* problem associated with deposit insurance. Moral hazard, present in

Chart 6
Equity to Assets Ratio for Texas Thrifts (Percent)



Note: Net worth measured under Generally Accepted Accounting Principles

Source: Thrift Financial Report, Federal Home Loan Bank Board

any insurance scheme, refers to the likelihood that insurance coverage leads insured parties deliberately to pursue risks that, in an uninsured state, they would not undertake. The flat-rate premiums assessed for deposit insurance make intermediaries' cost of this insurance independent of their risk profile. Given the moral hazard problem, insurance coverage tends to increase institution risk-taking unless deposit insurance is properly priced. Therefore, deposit insurance has not eliminated the risk of deposit institution insolvency, but merely transferred this burden from deposit institutions and their creditors to the deposit insurance funds.

Regulators impose capital standards on insured institutions to offset the moral hazard problem. Private capital acts as a

⁵ See Benston (1986), Cooper and Fraser (1986), Litan (1987), and Kane (1989) for a more complete description of the various changes in the regulatory environment. For a thorough analysis of the consequences of regulation in the financial services industry, see Haraf and Kushmeider (1988).

⁺ See Gunther (1989).

buffer to shield the deposit insurance funds from any potential losses these intermediaries might incur.5 When deposit insurance guarantees remain both credible and underpriced, too few managers find the benefits of strengthening their capital accounts to be worth the cost of raising additional equity. Underpricing of deposit insurance results in a substitution of equity in the form of insurance guarantees for private capital. Moreover, as the market value of deposit institutions' charters declines due to increased competition and adverse economic conditions, the insured institutions have increased incentives to gamble on more risky investments.6 With lower amounts of private capital at risk, managers are even more willing to undertake risky projects because they will benefit from any potential returns, no matter how remote the possibility. On the other hand, losses in excess of the capital cushion are absorbed by the deposit insurance fund. With little of their own capital at stake, deposit institutions are encouraged to adopt a higher-risk profile than they might in the absence of deposit insurance.7

Proposed Solutions

The lessons of the recent past help identify both the direct and indirect effects that arise from asset-quality problems at financial intermediaries. The direct effects spring from the operation of impaired or thinly capitalized institutions and the resulting decline in financial-intermediation

services. The healthy segment of the industry feels the indirect effects as adverse consequences arise from the continued operation of troubled intermediaries. Financial-institution distress, both in the Eleventh District and in the nation, has prompted a variety of innovative measures to resolve current difficulties and to enhance the safety and soundness of the financial system.

Bank Resolution Activities. In its resolution activities, the FDIC attempts to accomplish two goals: to minimize the cost of failure resolution to the deposit insurance fund and to maintain discipline in the banking industry. Traditionally, the FDIC has used two methods in resolving individual bank failures: the standard purchase and assumption (P&A) and the payoff (P/O). The P&A is the most common settlement practice. Under a purchase and assumption, a healthy bank purchases a failed bank, including the assumption of its sound assets, often with FDIC assistance. The P/O involves a payment by the FDIC to insured depositors. Then, the FDIC liquidates the assets of the failed institution and distributes the proceeds on a pro-rata basis to the failed institution's secondary creditors.

As the size and complexity of banking industry problems increased, the FDIC began to implement new procedures for resolving failed banks. Some of these new resolution activities represent variations on the two traditional methods. Other procedures involve various degrees of financial infusions to the ailing institutions. A more complete description of these innovations appears in the box on page 19.8

Financial Institutions Reform Recovery and Enforcement Act. In response to the continuing deterioration of the thrift industry, and in recognition of its potential impact on banks, President George Bush unveiled a comprehensive reform package on February 6, 1989. The legislation was signed into law on August 9, 1989, and is formally known as the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA). This legislation created the

⁵ See Buser, Chen, and Kane (1981), who argue that there exists both an explicit and an implicit premium associated with federal deposit insurance. The explicit premium is the flat-rate assessment. The implicit premium appears in the form of regulatory standards for capital adequacy. These authors argue that capital adequacy rules are the critical element in the FDIC's pricing strategy.

⁶ See Kane (1985) and Keeley (1988).

⁷ As was true before the 1980s, managerial factors in the form of fraud and abuse have also contributed to current financial difficulties.

⁸ For an analysis of thrift resolution activities in the 1980s, see Cole (1990).

FDIC Resolution Activities

The increasing frequency of bank failures led the FDIC to introduce several modifications to and innovations on its traditional resolution activities—the purchase and assumption (P&A) and the payoff (P/O). The modified payoff (MODPO) operates much like a P/O, but immediate fractional payments are made on the claims of secondary creditors rather than after liquidation.

The total asset purchase and assumption (TAPA) is an innovation classified as a whole-bank deal. All assets of a failed bank are passed to the acquiring institution, which then pays a negative bid premium for the failed institution. The insured deposit transfer (IDT) functions much like a P&A—after soliciting bids, the FDIC transfers all federally insured deposits, less a premium, to the winning bank. The deposit transfer and asset purchase agreement (DITAPA), introduced in 1986, is a combination of the insured deposit transfer and a P&A. Insured deposits are transferred to the acquiring institution, which may then purchase only those assets it

deems desirable. Setbacks in many FDIC-insured mutual savings banks in the late 1970s led to the development of the financially assisted merger (FAM). Under a FAM, the institution remains open with FDIC assistance until a merger can be arranged.

Under open bank assistance (OBA), the FDIC can assist a troubled bank before and in lieu of closure. A bridge bank (BB) is a full service national bank operated for up to three years by a board of directors appointed by the FDIC. Finally, the small loan asset purchase, or SLAP, is the most recent FDIC creation. The acquiring institution assumes all insured deposits and purchases all loans with balances below an established amount. Table 1 and Table 2 provide a summary of the distribution of these resolution activities both nationwide and in the District during the 1980s.

Resolution Trust Corporation (RTC) to merge or liquidate all existing insolvent savings and loan associations and any that fail in the next three years. The act placed the regulatory and supervisory functions of the Federal Home Loan Bank Board under the Treasury Department in the Office of Thrift Supervision. All twelve regional Federal Home Loan Banks are now under the newly established Federal Housing Finance Board, an independent agency of the Executive Branch. Thrift deposit insurance is brought under the FDIC, with separate thrift and bank reserve funds to be maintained.

FIRREA contains many measures ostensibly designed to prevent a recurrence of the events of the past few years. Thrifts must abandon some of their riskier activities, including equity investments and junk bonds. They must also have 70 percent of their assets in mortgage-related investments. Thrifts will be required to meet more stringent capital requirements and will ultimately be held to the same capital standards as banks. Many observers expect that problems plaguing the thrift industry today will be resolved through provisions in FIRREA. Sufficient funding may enable the RTC to close insolvent thrifts or merge them with healthy institutions. Satisfactory resolution of problem institutions would eliminate any adverse effects that these institutions can inflict on their healthy competitors.⁹

¹ For a more complete description of these resolution methods, see FDIC (1984, 1987), and Kane (1985).

⁹ See Short and Gunther (1988). For more on the competitive impacts of financial-sector distress and resolution, see Short (1990).

Table 1
Distribution of U.S. Failed Bank Resolutions (1980–89).

Year	P/O	P&A	TAPA	IDT	FAM	OBA	MODPO	Total
1980	3	7				1		11
1981	2	5			3			10
1982	7	25			10			42
1983	7	35		2	4			48
1984	1	62		12	1		3	79
1985	18	87		7	2	2	4	120
1986	12	98		19	5	2	9	145
1987	10	133		40	5	14	1	203
1988	6	95	69	30		20		220
1989	9	89	42	22		1		207
Total	75	636	111	132	30	40	17	1,085

Resolution Methods:

P/O = Deposit Payoff or Liquidation

P&A = Purchase and Assumption

TAPA = Total Asset Purchase and Assumption

IDT = Insured Deposit Transfer

FAM = Financially Assisted Merger

OBA = Open Bank or 13(c) Assistance

MODPO = Modified Payoff

DITAPA = Insured Deposit Transfer and Assets Purchase Agreement

Notes: Open Bank Assistance (OBA) was granted to First Pennsylvania Bank in 1980. OBA granted to First City counted in 1988 as assistance to one bank. OBA granted to United Bank Alaska and Alaska Mutual Bank in 1988 counted as assistance to one bank. Both banks sold to Alliance Bank. OBA granted to Texas Bancorp Shares counted as assistance to one bank in 1988. Texas Bank and Texas Bank North were merged. Forty FirstRepublic Bank Bridge Banks counted under P&A in 1988. Assistance granted to FirstRepublic on March 17, 1988, was not counted separately. One MBank was transferred to the Deposit Insurance Bridge Bank (BB) via a DITAPA transaction and is counted here under BB. A total of twenty banks from MCorp were under the Bridge Bank and were sold to BancOne Corp. Twenty-four banks of Texas American–Bancshares transferred to Texas American Bridge Bank on July 20, 1989, and later to Team Bank.

Source: Federal Deposit Insurance Corporation

Table 2Distribution of Eleventh District Failed Bank Resolutions (1980–89).

Year	P/O	P&A	TAPA	IDT	FAM	OBA	MODPO	DITAPA	SLAP	BB	Total
1980											0
1981											0
1982	2	4			1						7
1983		2			1						3
1984	3		3								6
1985	1	12		1			1				15
1986	1	25		1	1		3	2			33
1987	4	38	4	1		12	1	7			67
1988	4	11	34			4		14	14	40	121
1989	3	22	24	2		1		13	35	44	144
Total	15	117	62	8	3	17	5	36	49	84	396

Resolution Methods:

P/O = Deposit Payoff or Liquidation

P&A = Purchase and Assumption

TAPA = Total Asset Purchase and Assumption

IDT = Insured Deposit Transfer

FAM = Financially Assisted Merger

OBA = Open Bank or 13(c) Assistance

MODPO = Modified Payoff

DITAPA = Insured Deposit Transfer and Assets Purchase Agreement

SLAP = Small Loan Purchase and Assumption

BB = Bridge Bank

Source: Federal Deposit Insurance Corporation

Financial Reform. FIRREA represents an important step toward improving the safety and soundness of the financial system. However, additional reform measures could further enhance the effects of FIRREA. Congress recognized this by requiring in FIRREA that the Treasury Secretary and the General Accounting Office deliver, within eighteen months of the bill's enactment, separate studies of the deposit insurance system. These studies will investigate, review, and evaluate the current system in an effort to "reduce the probability of future problems in the financial sector that would necessitate Federal outlays." ¹⁰

The debate on further reform measures has not centered exclusively on the current structure of deposit insurance. Instead, to help ensure against a replay of recent events, a combination of reform measures has been proposed. Market-value accounting, more stringent capital requirements, and reform of the deposit insurance system, taken together, aim to restrain excessive risk-taking on the part of managers of financial intermediaries. Greater prudential supervision and examination would complement these market-oriented reforms and would also help temper the possibility for fraud and abuse in the financial sector.

A move toward a more accurate assessment of financial intermediaries' balance sheets would enhance regulators' goals of maintaining a safe and sound financial system. Market-value accounting, by providing

¹⁰ See Title X of FIRREA and paragraph 5001 of the *Conference Report* of FIRREA.

reliable information on the value of unrealized losses and gains, would also provide valuable information to investors and depositors. Valuing assets that do not trade in an open market is more difficult, but as long as unbiased appraisal techniques are used, errors in valuing individual assets would tend to cancel out one another.

Market-value accounting would also facilitate the introduction of more stringent capital requirements. Sufficient capital, measured at market value, helps ensure that owners of depository institutions, rather than the deposit insurance funds, absorb any losses that might occur. As Congress recognized in FIRREA, higher capital cushions enhance the condition of individual institutions and promote the stability of the banking system. Implementation of riskbased capital requirements, scheduled for 1992, represents a movement in this direction. These requirements provide a definition of capital, a scheme for risk-weighting bank assets and off-balance-sheet items, and target capital ratios.11

Observers have noticed that banking and thrift industry troubles, both in the District and nationwide, could not have occurred without the current system of federal deposit insurance. ¹² A flat-rate deposit premium encourages insured institutions to hold riskier portfolios than they otherwise would and at the same time penalizes more conservatively managed institutions. To address this issue, reformers have proposed measures to reduce or eliminate the moral hazard problem associated with deposit insurance.

Replacing the current flat-rate premium with a risk-based assessment, consistent with risk-based capital requirements, would eliminate some of the incentives the current system offers to engage in excessively risky activities. Administration of these proposals would require an accurate assessment of risk, however, which is not easy to accomplish. Implementing a system of coinsurance is another technique for ameliorating the defects in the current system of deposit insurance. Coinsurance introduces discipline on risk-taking by forcing depositors to participate in any realized losses. This could result in some loss of depositor confidence, though, as the unavoidable side effect of the introduction of coinsurance.¹³

The three interrelated proposals outlined-market-value accounting, more stringent capital requirements, and deposit insurance reform-are attempts to complement FIRREA by introducing greater discipline on the risky activities undertaken by depository institutions. This would be accomplished by offering depositors both more reliable information about the underlying soundness of financial institutions and incentives to monitor and respond to changes in an institution's risk exposure. These reforms would reduce the completeness of deposit insurance coverage for those depositors large enough and sophisticated enough to protect their exposure at a lower cost than regulators are able to achieve. As a result, the goal of these additional proposals for reform is to supplement the regulatory activities of those agencies responsible for the smooth functioning of the financial system. Coupled with more prudential monitoring and examination, these measures would provide flexibility for depository institutions to respond to a changing financial environment without imposing undue risks on the system of federal safety

Conclusions

Financial distress has been evident in the Eleventh District. A sharp regional recession brought about by the decline in oil prices in the early 1980s precipitated a host of bank and thrift difficulties. Economic factors alone, however, cannot account for the

¹¹ See Wall (1989) for a description of these proposed capital standards.

¹² See Carron (1988), and Kane (1985, 1989).

¹⁸ A coinsurance system was a part of the original deposit insurance plan. See FDIC (1984). Title X of FIRREA directs the Secretary of the Treasury to consider these (and other) reform measures in its report to Congress.

condition of financial institutions in the Eleventh District. A regulatory framework that encouraged risk-taking, along with managerial decision-making that responded to these incentives, also played a role in the current plight of District banks and thrifts.

The condition of depository institutions nationwide has also deteriorated. On a national scale, financial-sector difficulties can be traced to a melding of the same three interrelated factors—economic, regulatory, and managerial—that affected District financial institutions. Analysts expect recent

legislation to help resolve financial intermediaries' current distress. Additional measures that have been debated would complement regulatory efforts at achieving safety and soundness and would also help to prevent a replay of the current situation. A move toward more meaningful accounting measures, enhanced capital requirements, and diminution of the moral hazard associated with deposit insurance, would strengthen market discipline and serve as a safeguard against excessive risk-taking by depository institutions.

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