A Market Value Reporting System for Depository Institutions

Jaime Agudelo, Accounting, University of the Pacific Stockton

Abstract

The demise of the S&L industry should not have come as a surprise given the obstacles placed on a free market by the regulatory system. The lack of an economic accounting information system providing information of an institution's real value has been identified as instrumental in not allowing regulators timely detection of this situation. This article discusses an economic reporting system based on market values to replace the present historical cost system.

Introduction

The problems facing American depository institutions are now glaringly apparent and overwhelming. Cost estimates for resolving this crisis range from a conservative \$85 billion to as much as \$500 billion over three decades. The demise of the industry has spawned a substantial body of literature describing the economic, political and regulatory forces that contributed to this phenomenon as well as numerous proposals to solve and to prevent the recurrence of such debacle.(1)

In the savings and loan (S&L) industry this crisis should not have come as a surprise. The outcome should have been predictable given the obstacles placed on a free market by the regulatory environment and government guarantees which eroded discipline and promoted inefficiency in the market for depository institutions. Because regulators are charged with the task of protecting the public and preserving confidence in the financial system, they sought to shield institutions from risk. Ironically, however, since regulators guaranteed availability of government-insured funds and since this insurance was underpriced and available to even insolvent institutions, they actually provided incentives for risk taking behavior on the part of the insured institutions. These influences, combined with radical changes in the economic environment, and flaws in the regulatory system were the most significant causes of the collapse of the S&L industry.

One important flaw of the regulatory system is the

fact that regulators were unable or unwilling to detect and prevent excessive risk exposure due to inadequacies of the current information system. The lack of an economic accounting information system providing timely information of an institution's real value has been identified as instrumental in allowing regulators to defer the recognition and resolution of insolvencies.(2) Economic information based on market values is essential if regulators are to determine, on a timely basis, when an institution becomes insolvent.

This article describes an economic reporting system based on market values to replace the present system which is based on historical cost. It discusses, as a background, the economic events and regulatory flaws that brought about the current crisis and resolution attempts by regulators. The article argues in favor of reform proposals for a market value reporting system. The analysis includes a description of a market value accounting framework, obstacles to its implementation, and advantages of adopting such a system as a reporting mechanism for all financial institutions.

Background Summary of Industry Problems

During the last 25 years, the S&L industry has faced difficult competitive and economic environments. According to Kane (1989) from 1960 to 1987 competitive forces caused the number of thrift institutions to decline by more than half (from 6,230 to 2,961) and the

health of 25 percent of the survivors became highly questionable. Moreover, the economic shocks related to the escalation of short-term interest rates during the late 1970's and early 1980's and the regulatory restrictions on depository institutions compounded the industry's problems. In the early 1980's restrictions on the interest bank and thrifts could pay for deposits were removed, however, since the asset structure of the industry remained primarily long-term, low fixed-rate residential mortgages, the industry was faced with paying more for the deposits it collected than it earned on the loans it had made.

Expanded Thrift Powers Encouraged Risk-Taking Behavior

When short-term interest rates fell substantially in 1983, most thrifts were already insolvent on a market-value basis. Interest rate deregulation, however, is not the only culprit. Asset deregulation, albeit more gradual, allowed thrifts to diversify their portfolios by making consumer and commercial loans.

In certain states (California, Florida and Texas, for example) broader powers such as direct investments and other nontraditional investments were allowed. Some have argued that this deregulation encouraged aggressive risk-taking behavior on the part of managers of insolvent institutions. Such strategy meant that institutions adopted a policy of attracting additional funds by offering above-market interest rates and placing the funds in high-risk, high-yield assets such as speculative real estate, construction ventures and even junk bonds. According to Brumbaugh and Litan (1989, p.4), compared to their solvent counterparts, insolvent thrifts have invested substantially greater proportions of their funds in commercial mortgages and direct investments, two asset categories that were liberalized.

The Impact of Weakening Regulatory Intervention

Although the broader powers given to thrifts contributed significantly to the increasing failure rate in the industry, other important causes of the crisis were lax supervision coupled with forbearance from already weak capital standards. Lax supervision stemming from cuts in the number of thrift supervisors at a time when the Federal Home Loan Bank Board (FHLBB) was allowing entry of weakly capitalized purchasers into the industry is credited with the demise of over 400 thrifts by 1985 (Brumbaugh and Litan, p.7). In a report on thrift failures the General Accounting Office (GAO) concluded that costly failures resulted from regulatory violations and unsafe practices. Specifically, GAO's findings, among others, point out that (1) numerous violations of

laws occurred, including inaccurate appraisals for real estate investments, excessive loans for single borrowers, business with prohibited persons or insiders, and inadequate assessments of borrowers' ability to repay loans; (2) all of the failed thrifts had indications of fraud and insider abuse, of which the majority involved officers and directors; and (3) the FSLIC and FHLBB district banks did not address their multiple and conflicting roles as promoters, regulators and bankers of thrifts (GAO, February, 1989).

The RAP Alternative

Had the insolvent thrifts been closed or merged as soon as signs of insolvency appeared, the resolution cost might have been considerably lower. The FSLIC assisted in some mergers, but Congress and the administration did not provide enough funds to liquidate or merge all the troubled thrifts. As a result, sometime in 1982, regulators opted to disguise and overstate thrift institutions capital strength by lowering capital requirements to 3 percent while granting capital forbearance and allowing implementation of a series of lenient accounting measures that became known as Regulatory Accounting Principles (RAP). Since RAP innovations and capital forbearance provided the appearance of greater capital strength, the FHLBB, concerned with the survival of individual S&L's encouraged and allowed their use. One such innovation involved the issuance of "net worth certificates" by the FHLBB to S&Ls whose net worth had fallen below the required three percent. These were certificates of indebtedness from the S&Ls, however, counted as capital for regulatory purposes even though they were to be funded by the FHLBB only upon the imminent collapse of the issuing S&L.

Another RAP accounting innovation was the "purchase accounting" technique used to encourage S&Ls to sell waterdown assets in order to improve their liquidity. The resulting losses from adjusting these assets to market value (goodwill writeoffs) were deferred over unrealistically long periods. Also during the same period, the FHLBB allowed S&Ls to sell low coupon mortgages and to spread the loss over as many as 40 years. In both instances, the intent was to liquidate waterdown assets while disguising the real impairment of capital that would have resulted had the loss been recognized immediately. According to Donald G. Simonson and George H. Hempel, this approach was carried to an extreme by several state S&L regulators who allowed institutions to mark down loans to market value without actually selling them, and to defer the losses while they continued to carry the loans on their balance sheets. According to Simonson and Hempel (1990, p.95), this practice allowed institutions to receive the "benefits" of purchase accounting on loans for which there was no market.

Accounting discretion was used to disguise individual thrifts economic insolvencies and generally accepted accounting principles (GAAP) financial information lost accuracy relative to examination reports. For the deposit insurance fund, allowing these practices was shortsighted, particularly at a time when regulators failed to recognize the need to expand their examinations to handle the increased complexity of thrift operations. As a result, permitting these "zombie" thrifts-a term coined by Professor Kane--to continue operations created new generations of zombies which in turn drained away some of the profitability of the healthy segment of the depository industry.

Merger or Liquidation?

Rather than closing these failed institutions, the FHLBB and the FSLIC found it more expedient to assist the mergers with other institutions under the assumption that mergers would likely be less expensive than liquidations. However, this result obtains only when the acquirers put up substantial capital of their own and thus have economic incentives to operate the new institutions efficiently. Because many of these mergers deals were thinly capitalized, the resulting institution became dependent of FSLIC assistance which took the form of federal guarantees and certain tax benefits. The costs of the assisted mergers are difficult to estimate mainly because the guarantees to new owners against capital loss and yield deterioration on poorly performing assets extend for some length of time. Although these guarantees will typically phase out over some period, it is difficult to assess to what extent or even whether the new owners are required to contribute additional capital as the guarantees expire. According to Brumbaugh and Litan (p. 8), however, the cost to the Board of merging insolvent thrifts increased substantially since 1985, from 36 percent of the cost of liquidating them to 89 percent of liquidation costs in 1988.

Moreover, the liquidation costs do not include tax benefits given to new owners, namely using accumulated premerger operating losses to offset income from the owners' other businesses or from future income because these costs are borne by the Treasury, not the Board. In an analysis of Bank Board 1988 deals, GAO (March, 1989) estimated tax benefits for the 86 transactions resolved in that year totalled about \$ 8 billion.

A Market Value Measurement System

Radical changes in the economic environment, cou-

pled with flaws in the regulatory system have been credited with the demise of the S&L industry. One fundamental flaw in the regulatory system was the lack of an economic accounting information system providing timely information on an institution's real value thus allowing regulators to defer the recognition and resolution of insolvencies. As a result, it was possible for institutions to experience substantial declines in asset values between monitoring intervals yet, they were not recognized in time to prevent some institutions that had been considered "adequately capitalized" from becoming insolvent before corrective measures could be formulated.

From a prudential regulatory perspective, the sole criterion for determining whether an activity is appropriate for a depository institution should be whether its impact on the market value of the institution's capital can be monitored accurately on a timely basis. Thus, only when a depository institution's assets and liabilities are "marked to market" can depositors, investors and regulators ascertain its true condition -- the impact that transactions and activities will have on the amount of shareholders capital and the risk associated with those activities.

Current Status of Market Value Accounting

Despite the fact that inadequacies of the historical cost reporting system have long been recognized by the financial community, the industry and its regulators have traditionally resisted periodic attempts to establish market value accounting.

The only recognition of economic value has been the reporting of loans at approximate market values through the creation of loan loss reserves which are periodically revised to reflect economic circumstances. However, these loan loss reserves are arbitrarily set by management, regulators and external auditors.

One major attempt at promulgating an economic reporting system occurred in 1982 when the Federal Home Loan Bank Board (FHLBB) created a task force to "consider and recommend appropriate uses of current value accounting." The resulting proposal (FHLBB, 1983), labeled "Mark-to-Market Accounting," would have allowed adjusting an institution's financial assets and liabilities to current value. The proposal was withdrawn after considerable opposition from the industry and regulators who viewed such a system as impractical.

The disparity between RAP and GAAP accounting lead to recognition among regulators that financial

institutions' balance sheets had become devoid of economic validity. In response to this situation and as a result of the economic collapse of the industry, the Financial Accounting Standards Board (FASB) embarked on a two part project to improve financial reporting in the industry. The first part resulted in the issuance of FASB Statement No. 105 (March, 1990) dealing with the narrower issue of disclosures about financial instruments with off-balance sheet risk and concentrations of credit risk. Specifically, Statement No. 105 requires all entities with financial instruments that have off-balance sheet risk to disclose information about the extent, nature and terms of these financial instruments. The statement also requires disclosures about credit risk concentrations for all financial instruments. including the loss that would occur if any part of the instrument failed completely to perform; and the entity's policy for requiring collateral or other security and a description of the collateral held.

The second phase, dealing with the most controversial of the proposals, resulted in FASB Statement No. 107 "Disclosures About Fair Value of Financial Instruments (December 1991)," which requires entities to disclose the fair value of all financial instruments. Entities will be required to disclose both assets and liabilities on and off the balance sheet, if practicable to estimate. If market value is no practicable to estimate, required disclosures would include (1) information about the carrying amount, interest rate, maturity, and other characteristics pertinent to estimating fair value; (2) reasons why it is not practicable to estimate fair value. Examples of financial instruments that would require fair value disclosure are debt, debt securities, equity securities, trade receivables or payables, put or call options, financial futures and forward contracts, and interest rate and currency swaps. It should be noted, however, that FHLBB regulators began requiring S&Ls to report their trading account securities (mortgage-backed and sub-investment grade) at market value in 1988.

A Comprehensive Market Value Framework

The initial steps just described have provided an impetus to discontinue RAP accounting and move in the direction of a GAAP reporting system where market values are applied selectively rather than on a comprehensive basis. The problem with this approach is that the resulting information does not provide a clear view of an institution's risk exposure. What is needed is a definite and comprehensive approach to implementation of a market value accounting framework. According to Glenn and Kling (1988, p.17), among the chief advantages of such a system is that it will provide the information base to manage an institution's interest rate

risk while focusing attention on factors that affect the long-term value of the firm.

One approach to add the needed information has been suggested by Johnson and Peterson (1989). Under this approach, illustrated in Exhibit 1, each asset and liability category would be shown at historical cost, but each category also would have a current value reserve reported as a contra account, showing the difference between current value and historical cost. The current value reserve on net worth would be the resulting balance of all asset and liability current value reserves, i.e., a forced figure. Net income, would be measured as the change in net worth current value reserve from that of the previous financial statement.

This approach is simplistically appealing because it appears to be easier to integrate with historical cost financial statements. However, creation of reserve current value contra accounts may lead to arbitrary setting of amounts in these accounts by management and bank regulators similar to the arbitrary setting of loan loss reserves under RAP accounting. The resulting net worth figure would then be devoid of any economic significance. Furthermore, under this approach, the symptoms of interest rate risk would become impractical if not impossible to assess because it would merely give a static snapshot of the firm's value yet it says little about the firm's risk exposure or what might be done to reduce or eliminate that exposure.

An approach that attempts to constrain the firm's interest rate risk while focusing on its long-run value is the adoption of a valuation model for every type of asset and liability that has a significant impact on the value of the firm. Such pricing models have the advantage of providing a dynamic, rather than a static, analysis of how changes in interest rates are likely to affect the value of the firm's portfolio. Risk management under this approach would be concerned with assessing how the long-run value of the firm would change, that is, how would the firm perform under alternative rate scenarios.

According to David W. Glenn and Arnold Kling (p. 17), this type of analysis consists of two steps. The first is to estimate the current value of the firm, by valuing assets and liabilities on and off the balance sheet. The market value of the firm also includes its "franchise value," which is the present value of profits from prospective business in the years ahead. The second step, which is considerably more difficult, involves estimating the value of the firm under hypothetical "what if" situations. Market prices can be used to estimate fair values of most balance sheet items. For example, with the trend towards securitization of cash flows most of

Exhibit 1*						
A Hypothetical and abbreviated current value balance sheet for a savings and loan February 28, 19X3						
<u>Assets</u>		<u>Liabilities</u>				
Cash	\$ 3,000a	Demand deposits	\$ 10,000a			
1		Savings deposits	13,000a			
Business loans	15,000a	Money market accounts	25,000a			
Marketable securities	6,000	Time certificates of deposit	35,000			
Current value reserve	(500)	Current value reserve	(2,000)			
Installment loans	14,000	Federal Home Loan Bank Board Advances	10,000			
Current value reserve	(500)	Current value reserv <u>e</u>	(2,000)			
Mortgage loans	58,000					
Current value reserve	(8,000)					
Net fixed real assets	4,000					
Current value reserve	<u>3,000b</u>					
Total assets	\$100,000	Total liabilities	\$ 93,000			
Current value reserve	(6,000)	Current value reserve	(4,000)			
		Net worth	7,000			
		Current value reserve	(2,000)c			
a Assets and liabilities with maturities of one year or less have minimal price volatility and could be valued at historical cost only; these could be called monetary assets.						
b This balance sheet shows a current value reserve for real assets. Although this figure is necessary for a comprehensive current value accounting system, the valuation of real assets isn't an integral part of this article.						
c Forced figure.			1			

*Source: Ramon E. Johnson and Paul T. Peterson, "Current Value Accounting for S&Ls: A Needed Reform?, Journal of Accountancy, January 1984, p. 82.

the S&L's assets have either direct market quotations available or have a reasonable price analog as a guide to valuation.

Illiquid assets, off-balance sheet items, and intangibles, on the other hand, would require a valuation methodology using valuation models that would incorporate "what if" situations. These models would enhance market information in that they are able to explain the current market prices of traded securities,

thus providing an important gauge of their realism. One such model is a Net Present Value (NPV) model currently in use at the Federal Home Loan Mortgage Corporation (Freddie Mac) to analyze the rate sensitivity of the company's portfolio of assets and liabilities.(3)

The NPV analysis involves projecting cash flows for all assets and liabilities and calculating the present value of these cash flows using discount rates that produce the Aggeta

Exhibit 2

Illustration of Net Present Value Model

 Assume that in book value terms, the depository institution has the following balance sheet:

Assets Liabilities and Net Worth 8% 15-year mortgages \$1,000 Short-term debt \$1,000 9% 30-year mortgages 1,000 8% 15-year debt 1,000 Net Worth 0

2. Suppose that the prevailing mortgage interest rate (Im) is 8 percent and the yield on newly issued long-term debt (Yd) is 7 percent. Estimating the firm's market value requires discounting future cash flows using appropriate rate for each component of the balance sheet. The firm's market value balance sheet would be:

<u> </u>		DIADITICIES and Nec	WOLCII
8% 15-year mortgages	\$1,000	Short-term debt	\$1,000
9% 30-year mortgages	1,112	8% 15-year debt	1,091
		Net Present Value	21

Note that under book value (i.e., historical cost) accounting the firm's net worth was zero, however, the market value analysis yields a NPV of \$21.

3. Once this market value is determined, the firm can find its market value under any scenario. For example, assume a 100 basis point increase in the level of interest rates. Thus, Im increases to 9% and Yd increases to 8%. The market value of the firm under this scenario would be:

Assets		<u>Liabilities and Net</u>	Worth
8% 15-year mortgages 9% 30-year mortgages	\$ 920 1,000	Short-term debt 8% 15-year debt Net Present Value	\$1,000 1,000 (80)

Note that this scenario yields a decrease in net worth from \$21 to \$(80). New scenarios could be evaluated to take into account the effects of interest rate sensitivity on prepayment rates and on the potential value of new business.

market value for each item under different rate scenarios. Exhibit 2 illustrates an example of NPV analysis. The NPV is the difference between the present values of all cash inflows and outflows over the time horizon chosen. Initially, the interest rates scenarios used could be simple deviations from the current level of interest rates, however, more realistic assumptions can be incorporated. For example, scenarios of rising and falling interest rates, modification of cash flows to take into account prepayment rates, and other factors could be incorporated to produce various simulation results.

Pricing models such as the NPV model can be used in the context of a market value framework to analyze individual financial decisions. However, financial decisions must be made after evaluating how each choice would affect the overall interest rate sensitivity of the firm. This is because the relationship between changes in an institution's net worth and changes in interest rates is not constant over time, rather it is influenced by changes in the level, volatility and term structure of interest rates as well as the institution's financial decisions. That is, in deciding between specific financial alternatives, to evaluate which is riskier requires a consideration of the composition and nature of the firm's portfolio of assets and liabilities. For example, if it appears that falling interest rates would be more damaging than rising interest rates to the market value of that portfolio, then the firm would be likely to choose short-term debt to minimize its risk (Glenn and Kling, p.18). In this

Liabilities and Net Worth

context, the firm's approach to risk management would require focusing on how decisions affect its long-run value rather than its short-term earnings.

Implementing Market Value Accounting

While the case for market value accounting can be easily made on conceptual grounds, from a practical standpoint its implementation is much more difficult. Lack of valuation models for illiquid and off-balance sheet items is perhaps one of the most formidable barriers to making current value accounting feasible.

However, as Simonson and Hempel (p. 98) suggest, for depository institutions this problem seems overstated since approximately 75 percent of S&Ls assets have either direct market quotations available or have a reasonable price analog as a guide to valuation. Moreover, the trend towards securitization of many depository institution's assets, and the establishment of secondary markets for mortgages, large commercial loans, and loans to less developed countries, has significantly affected the composition of portfolios making them more liquid and thus easier to determine their market values and cash flows. For those items that remain highly illiquid, a valuation methodology such as the NPV model may yield results that would not compromise the integrity of measuring the firm's interest rate risk.

There is a strong case for implementing a comprehensive market value reporting system. The perception that such a system is misleading and not feasible can not be used as an excuse for continuing the present reporting system. In a market-driven economy, only a market value reporting system would yield the necessary objective and reliable information to assess depository institutions' interest rate risk exposure. In this regard, recent regulatory developments requiring that institutions derive measures of their economic capital from the economic valuation of their assets are encouraging. Specifically, S&Ls are now required to set limits on, and to calculate the changes in, the mark-to-market value of their net worth, assuming parallel shifts in the yield curve of plus or minus one, two, three and four percent.

Implementation of a comprehensive market value reporting system requires that market values should be used for internal decision making as well as for financial reporting purposes. Otherwise reported results may not reflect the firm's success in controlling or minimizing interest rate risk. The transition to risk-based capital rules and insurance rules will contribute greatly towards this development. Regulators, accounting bodies and others responsible for qualitative reporting in the

industry should continue to encourage and accelerate experimentation with various valuation models with the aim at developing a reliable measurement system.

Market value reporting on the other hand, does not imply a complete abandonment of historical cost. Implementation of a market value reporting system would require a gradual step by step implementation approach starting with those assets and liabilities for which market value measurements can be reasonably obtained and reporting those values for both regulatory and financial purposes. Historical cost information would continue to be reported along with market value information until institutions and users become totally familiar with the new reporting system.

Conclusions

The net economic value of an institution is affected by both changes in the level, structure and volatility of interest rates as well as by the institution's financial decisions. A market value reporting system will allow the institution to assess how these events affect its overall interest rate sensitivity, thereby allowing it to manage interest rate risk more carefully and with an eye towards how decisions affect its long-run value rather than its short-run earnings.

The regulatory and financial communities have become more receptive to a market value reporting system. Experimentation with valuation models is necessary in order to attain its full scale implementation. The transition to risk-based capital rules for the industry as well as upcoming revision of the deposit insurance system should provide the impetus necessary to develop a reporting system that would enable regulators to improve their assessments of institutions' performance. This in turn, will allow identification of well-managed institutions and the development of a deposit insurance premium system that will not penalize these institutions at the expense of weak institutions.

Suggestions For Further Research

Although financial institutions have opposed market value reporting, the reality of FASB Statement No. 107 and the impetus for a mark-to-market reporting on the part of the Securities and Exchange Commission suggest that empirical studies should be conducted to ascertain the perceived added relevance of the fair value disclosures. On such study would involve determination of whether a move to mark-to-market accounting would produce volatile swings in institutions' earnings. A related study could also determine whether the change to fair value reporting would prevent financial institu-

tions from taking potentially costly risks on movements in interest rates.

Endnotes

- 1. See for example, Blueprint for Restructuring America's Financial Institutions: Report of a Task Force, The Brookings Institution, Washington, D.C., 1989; U.S. General Accounting Office, Troubled Financial Institutions: Solutions to the Thrift Problem, Washington, D.C., February, 1989; R. Dan Brumbaugh, Jr. and Robert E. Litan, "The S&L Crisis: How to Get Out and Stay Out," The Brookings Review, Spring, 1989, and Grundfest, Joseph A., "Lobbying into Limbo: The Political Ecology of the Savings and Loan Crisis," Stanford Law and Policy Review, Spring, 1990.
- 2. See for example, Donald G. Simonson and George H. Hempel, "Running on Empty: Accounting Strategies to Clarify Capital Values," Stanford Law and Policy Review, Spring 1990; Edward J. Kane, The Gathering Crisis in Federal Deposit Insurance, MIT Press, Cambridge, MA, 1985.
- 3. A detailed description of this model is provided by Glenn and Kling, pp. 18-19.

References

- 1. Blueprint for Restructuring America's Financial Institutions: Report of a Task Force, The Brookings Institution, Washington, D.C., 1989.
- 2. Brumbaugh, Jr., R. Dan and Robert E. Litan, "The S&L Crisis: How to Get Out and Stay Out," *The Brookings Review*, Spring, 1989.
- 3. Federal Home Loan Bank Board, Report of the Expanded Task Force on Current Value Accounting, U.S. Government Printing Office, Washington, D.C., 1983.
- 4. Financial Accounting Standards Board, Disclosure of Information About Financial Instruments with Concentrations of Credit Risk, Statement No. 105, March, 1990.
- 5. Financial Accounting Standards Board, Disclosures About Fair Value of Financial Instruments, Statement No. 107, December, 1991.
- 6. Glenn, David W. and Arnold Kling, "Market

- Value Accounting: A Practical Perspective," Secondary Mortgage Markets, Summer, 1988.
- 7. Grundfest, Joseph A., "Lobbying Into Limbo: The Political Ecology of the Savings and Loan Crisis," *Stanford Law and Policy Review*, Spring, 1990.
- 8. Johnson, Ramon E. and Paul T. Peterson, "Current Value Accounting for S&L's: A Needed Reform?," *Journal of Accountancy*, January, 1984.
- 9. Kane, Edward J., *The Gathering Crisis in Federal Deposit Insurance*, MIT Press, Cambridge, MA, 1985.
- 10. Kane, Edward J., The S&L Insurance Mess: How Did It Happen?, The Urban Institute Press, Washington, D.C., 1989.
- 11. Simonson, Donald G. and George H. Hempel, "Running on Empty: Accounting Strategies to Clarify Capital Values," *Stanford Law and Policy Review*, Spring, 1990.
- 12. U.S. General Accounting Office, Troubled Financial Institutions: Solutions to the Thrift Industry Problem, U.S. General Accounting Office, Washington, D.C. February, 1989.
- 13. U.S. General Accounting Office, Failed Thrifts: GAO's Analysis of Bank Board 1988 Deals, U.S. General Accounting Office, Washington, D.C., March, 1989.
- 14. U.S. General Accounting Office, Thrift Failures: Costly Failures Resulted from Regulatory Violations and Unsafe Practices, U.S. General Accounting Office, Washington, D.C., June, 1989.