The institutional arrangements for U.S. savings and loan institutions were a disaster waiting to happen. Recent economic events and government policies made it a big disaster. Developing countries can learn some important lessons from this experience.

Before the late 1970s, U.S. savings and loan institutions (S&Ls) were primarily mutually-owned institutions with limited management capabilities, limited investment options, and virtually unlimited interest rate exposure.

The industry was closely tied to real estate so conflicts of interest and concentrations of credit were accepted. The regulatory-supervisory system was also closely tied to the industry so it had trouble identifying problems and imposing appropriate discipline.

When interest rates escalated beyond imagined levels, this borrow-short, lend-long industry suffered great operating losses, which depleted modest capital levels in many S&Ls. Interest rates and asset prices varied greatly, and S&Ls were constrained in their ability to diversify and hedge against risk. Prudential supervision and regulation were inadequate and were subject to pressures to liberalize the activities of institutions inexperienced in the new activities.

Parts of the industry were allowed to continue operating and assuming new risks despite insolvency. It was difficult for the government and banking authorities to acknowledge these losses and to pursue policies that would bring an end to them, and their delay in doing so increased the costs and distortions in U.S. resource allocation. Losses borne by the economy will be paid for by the general public.

Although the United States has a highly sophisticated and innovative mortgage market that is not found in developing countries, the lessons of its failures in regulating and supervising the savings and loan industry are highly relevant for the many developing countries that suffer from widespread distress in their financial systems.
# The Savings and Loan Problem in the United States

by

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## Table of Contents

I. Background 2  
Interest Rate Risk 5

II. Problems Faced by S&Ls and Responses to Them 8  
Increase in Interest Rates 8  
Attempts to Shore Up S&Ls 9  
Improved Performance 14  
Examination and Supervision 15

III. Policies for Handling Failing S&Ls 18  
Income Maintenance 19  
Taxes and Geographic Expansion 20  
Accounting and Capital 22  
Phoenixes and Management Consignment 23  
Income Maintenance on Nonperforming Assets 25  
Policies for Handling Failures: A Summary 26

IV. FDIC Experience with Mutual Savings Banks 28

V. Recent Efforts to Resolve S&L Problem 32  
The Legislation 34

VI. Summary and Conclusions 41

Tables 47  
Footnotes 49  
Bibliography 52
THE SAVINGS AND LOAN PROBLEM IN THE U.S.

During the past ten years savings and loan associations (S&Ls) in the U.S. have encountered enormous interest rate and credit quality problems. During this same period, about 30 per cent of the S&Ls have been closed or merged. A large percentage of those operating today are insolvent or approaching insolvency, and they are not likely to survive. The cost associated with closing insolvent S&Ls and paying the remaining bill for those closed or merged in the past two years is likely to exceed $100 billion on a present value basis, or about two per cent of GDP. Current federal budget estimates, which include related borrowing costs, exceed $160 billion.

The case of S&Ls in the U.S. is of interest from a number of perspectives to other countries, especially developing countries that have experienced insolvency in their financial system on a large scale. While some aspects of the S&L experience is distinctive, the overall experience in many respects has close parallels with that of other financially distressed systems. In particular, the experience of deregulation accompanied by institutional and prudential regulatory weaknesses and, ultimately, the recognition of widespread losses, has similarities to experience elsewhere.
The first section of this paper provides background on the development of the industry's problems. Section II discusses various regulatory attempts to shore up S&Ls and Section III covers the policies pursued in connection with closing or merging insolvent S&Ls. In Section IV the manner in which the FDIC dealt with similar (though smaller) problems encountered by mutual savings banks (MSBs) are compared with the handling of S&L problems. Section V covers more recent efforts to resolve the S&L problem, and includes a discussion of the legislation that was recently enacted to deal with the S&L problem and how that legislation is likely to be implemented. The final section provides a general summary and conclusions on the causes of the S&L problem and the contribution of public policy decisions to exacerbating the problem and magnifying its costs. The appendix includes statistical data on S&L performance and on interest rates that are intended to place the discussion in better perspective.

I. Background

Savings and loan associations (S&Ls) and mutual savings banks (MSBs) developed beginning in the 19th century as institutions oriented toward the household saver and the mortgage borrower. While the institutions had somewhat different origins and areas of geographic concentration (MSBs were largely confined to New England and the Middle Atlantic
states), where S&L's were relatively less important, both institutions generally have been grouped together under the heading of "thrift institutions" and they had certain common characteristics. Both were mutually owned and run by self-perpetuating boards of directors or trustees; both concentrated investments in long-term fixed rate assets, principally residential mortgage loans; and both were largely funded by savings and time deposits from the household sector. MSBs were state-chartered institutions whose powers were determined by state law. For the most part, they had broader investment powers which included consumer lending, non-residential mortgages, corporate bonds and even some corporate stock. Most MSBs obtained FDIC deposit insurance after it became available to them in the 1930s.

S&Ls were patterned after British building and loan societies, and confined their lending activity to home mortgages. Regulation of S&Ls, to the extent it existed prior to the 1930s, was handled at the state level. In the 1930s Congress established the Federal Home Loan Bank System, which included three components: the Federal Home Loan Bank Board (FHLBB); the Federal Savings and Loan Insurance Corporation (FSLIC); and 12 regional Federal Home Loan Banks (FHLBs). The FHLBB became the principal regulator for S&Ls. Those obtaining federal charters became subject to FHLBB regulation. The FSLIC, which provided deposit insurance coverage similar to that provided to banks by the FDIC, was placed under and was
essentially managed by the FHLBB. Federally chartered S&Ls automatically obtained FSLIC insurance. State-chartered S&Ls could apply for and obtain FSLIC insurance, but if they did so they became subject to FHLBB regulation.

Although the stock of the FHLBs was owned by member S&Ls, the Boards of Directors of the FHLBs were partially selected by the FHLBB which exerted certain other authority over them. The FHLBs could borrow in private financial markets and lend to member institutions, primarily through advances collateralized by mortgages. Some of the supervisory functions of the FHLBB were delegated to the FHLBs, although examination activities remained a function of the FHLBB.

The legislation establishing the FHLBB directed it to encourage local thrift and home financing and to promote, organize and develop thrift institutions. For many years critics of the Federal Home Loan Bank System have maintained that S&L regulators have been too close to the industry and too concerned with advancing its, as opposed to the public's, interest. The ownership and governance of the FHLBs (and S&L input into the supervisory process) has been questioned. In addition, the housing industry has always had strong ties to S&Ls, and both industries have long played an important role in U.S. politics, thereby politicizing many of the issues related to regulation of S&Ls. As a result, S&Ls and their principal trade associations have frequently been able to use the
political process to influence the regulation and supervision of the industry.

**Interest Rate Risk**

Most of the assets of thrifts after the end of World War II were home mortgages, and the typical mortgage instrument in thrift portfolios between 1946 and 1980 was a fixed-rate mortgage with an original maturity of 25 to 30 years on a single family home. A large percentage of these mortgages carried some form of Government agency guarantee on most of the loan principal. Credit losses, even on mortgages without Government guarantees, were low because of a variety of factors, including a strong economy and generally rising home prices.

Most economists and market observers had been concerned for some time about the vulnerability of thrift institutions to rising interest rates. In periods when interest rates did increase, the deposit costs of thrifts rose faster than loan income from a slowly changing portfolio, and as a result, interest margins and earnings of thrifts declined. However, until the late 1970s interest rates fluctuated within a relatively narrow band so that interest rate exposure led to few serious supervisory problems among thrifts. The impact of interest rate fluctuations was lessened by several factors:
institutions did not have to mark to market their fixed rate asset portfolios; few had to meet the disclosure requirements of publicly-traded institutions; spreads between rates on new loans and deposits were generally favorable; and deposit interest ceilings limited rate competition among depository institutions. Even when individual institutions approached insolvency, they rarely faced serious liquidity problems because most depositors were fully insured and the FHLBs generally were willing lenders to S&Ls.

At various times there were efforts to expand the use of variable rate mortgages which linked mortgage rates to deposit costs or rates on marketable securities. In some states, notably California, variable rate mortgages were permitted for state-chartered institutions. At the federal level, however, consumer-oriented groups blocked efforts to permit variable rate mortgages by federally chartered S&Ls. In 1979 the FHLBB authorized the use of mortgages with limited variable rate features, and in 1981 restrictions on mortgage terms were largely eliminated. That turned out to be too late for many institutions. It should be noted that in some parts of the country (particularly New England) mortgages whose terms were renegotiated every five years or so were not uncommon. Such instruments were also common for commercial mortgages of MSBs and commercial banks.

Hindsight strongly indicates that S&Ls were under-pricing
risk in mortgage lending. Typical instruments permitted the
borrower to prepay his fixed-rate loan balance with no more
than a modest penalty. Thus, if rates declined, "high rate"
loans were frequently prepaid so that the lender's exposure to
interest rate fluctuations was not a symmetrical one.
Competitive pressure among thrift institutions and a strong
American tradition of subsidizing home ownership contributed to
the persistence of an extremely risky situation for mortgage
lenders. (Some would argue that competition forced the thrift
industry to pass on the subsidy it received as a result of
interest ceilings on time and savings deposits.)

Clearly, regulatory policy underestimated the risk. While
most regulators might have preferred less interest rate risk,
they failed to champion the cause of variable rate mortgage
lending until serious problems developed. A stock-owned thrift
industry that was responsive to investor requirements probably
would have been more sensitive to its interest rate exposure.
Mutual institutions were not under pressure from market forces
to earn risk-adjusted equity returns on their capital
investment. That, and limited legal investment options,
forestalled the appropriate market adjustments to the risky
environment for mortgage lenders. It is not a coincidence that
California S&Ls, the first to become stock institutions, were
most active and successful in gaining authority to make
variable rate mortgage loans.
II. Problems Faced by S&Ls and Responses to Them

Increase in Interest Rates

Despite their rate vulnerability, as long as interest rate fluctuations were moderate, fluctuations in S&L earnings were also moderate. That changed dramatically in the late 1970s when inflationary pressure in the economy boosted interest rates substantially. Treasury bill rates which had averaged about 5.5 percent in 1977, averaged more than 10 percent in 1979, and peaked at close to 16 percent in 1981 (Table 2 in Appendix). Depository institutions experienced substantial deposit outflows, interest ceilings at banks and thrifts were raised, new deposit instruments were developed, and eventually deposit rate ceilings were eliminated altogether.

As the cost of funds increased at S&Ls, their interest margins declined sharply, turning negative in 1980 and remaining negative through 1982. As a result, S&Ls experienced substantial operating losses. If S&Ls had been required to mark their mortgage portfolios to market at the time of peak interest rates in 1981 and 1982, typical write downs would have exceeded 20 percent, and virtually all S&Ls would have been
insolvent. In the aggregate book insolvency would have approached $100 billion.

Several insolvent S&Ls were acquired by stronger institutions in transactions in which FSLIC provided assistance that covered the negative spread between the cost of funds and yields on fixed rate mortgages. In some instances acquiring institutions obtained capital forbearances, that is, they were exempt from prevailing capital standards for a specified, sometimes lengthy, period. Acquirers also received tax benefits or opportunities to expand geographically that would not have otherwise been available. While these arrangements were sometimes innovative and imaginative, they did not always serve the long-run interest of the industry or the public.

Attempts to Shore up S&Ls

It became apparent to the FHLBB that FSLIC's resources (its book net worth was about $6 billion in 1981) would be depleted if it continued to provide substantial financial assistance in order to close or merge failing S&Ls. When the FHLBB and Congress were unwilling to acknowledge the extent of the problem, it became necessary to find ways to deal with the S&L problem that did not involve cash outlays or obvious commitments from FSLIC. The FHLBB and Congress attempted to shore up reported industry earnings and net worth through a
variety of devices, including "net worth certificates", deferred losses on asset sales, and favorable accounting treatment in acquisitions of failing institutions. Between 1980 and 1983 about 470 FSLIC-insured institutions (about 12 percent of the institutions) were closed or merged to avoid failure. In the majority of these transactions FSLIC provided little or no tangible financial assistance. While the various arrangements or devices employed did not contribute to "real" earnings or net worth, they bought time and delayed technical insolvencies, or they dealt with insolvencies without immediately tapping FSLIC resources. (In some cases insolvent S&Ls were simply allowed to continue to operate.) This was supposed to buy time until interest rates declined and/or the institutions could grow out of their problem. Eventually interest rates did decline and many S&Ls became profitable again. In the case of others, however, the unfavorable results of the policies that they pursued more than offset the benefits of lower interest rates. Aggressive growth, sometimes through lending in areas where the institution had limited experience, contributed to massive asset quality problems that began to appear just when interest rate problems no longer seemed so important.

Many S&Ls were allowed to operate even though they were insolvent according to regulatory standards, and, until mid 1985, there were few restraints placed on their growth. Indeed, the FHLBB reduced net worth requirements, at least in
part, to prevent such requirements from restraining S&L growth. This growth required S&Ls to pay high rates for their deposits, and in order to offset the increased cost of funds they pursued higher yielding (generally riskier) assets. Unfortunately, many of these institutions did not have the staff to make such loans prudently; some were victimized by dishonest operators inside and outside their institutions; and real estate markets subsequently deteriorated most in precisely those areas where loans could be most readily booked.

Federal legislation enacted in 1982 expanded lending options for federally chartered thrifts. Several states had previously liberalized powers for state-chartered S&Ls. Texas had taken the lead much earlier in expanding what state-chartered institutions could do. Direct investment powers opened up riskier opportunities to institutions searching for high return and willing to take risks, and many used these powers poorly. Capital requirements that were insufficient to cushion traditional S&L risks were certainly not sufficient to cushion riskier activities.1/ In addition, examination and supervisory staff and policies that were developed for an industry that lent principally on single family mortgages, were not prepared to deal with riskier asset portfolios.

In the high interest rate environment that characterized much of this period, spreads between rates on new mortgages and
the cost of funds for thrifts (deposits and short-term borrowings) were very high. Growth afforded the opportunity to raise average spreads — the spreads on "old" loans were generally negative. New loans also afforded up-front loan fees which, according to then-prevailing accounting practices, could be fully used to boost current earnings. Commercial mortgages provided even higher returns and less interest rate risk. They could most readily be booked in Texas and other "hot" real estate areas in the west. Growth, presumably, could improve earnings and raise the value of solvent and insolvent S&Ls. The FHLBB's past experience suggested that S&L problems came principally from interest rate risk. Credit risk was substantially underestimated.

Despite the weakened condition of FSLIC-insured S&Ls, they continued to grow rapidly during the period of distress under discussion. During the eight year period between year-end 1978 and year-end 1986 FSLIC-insured institutions grew by approximately 125 per cent, a compound annual growth rate in excess of 10 per cent. A significant share of this growth was financed through increased borrowing.2/ S&Ls in Texas grew by approximately 230 per cent, a compound annual growth rate of approximately 18 per cent. During this same period FDIC-insured commercial banks, which were generally in better financial condition, grew at a compound annual rate of about 7.5 per cent.
When an insolvent institution is permitted to operate, it has substantial incentive to "roll the dice" in order to try to become solvent. In other sectors of the economy creditors would have long since forced these insolvent institutions into bankruptcy. However, where funding comes from federally-insured deposits and secured borrowings, most creditors have little reason to exercise any discipline. Given this situation, it was essential that the FHLBB protect itself and FSLIC, and close the insolvent institutions or, when that was not possible, impose tough constraints on their growth and lending. Because this was not done soon enough, what might have been a manageable problem for FSLIC increased well beyond its financial capacity to resolve it.

A number of troubled S&Ls were purchased by investors for very little cash. Operating with enormous leverage and deposit insurance, these institutions frequently took enormous risks, sometimes in the hope of regaining solvency. However, in several situations, particularly in Texas, investors used the funds of newly acquired S&Ls to finance projects where they had substantial direct interests. In some cases the financial arrangements involved clear-cut fraud. Some suggested that buying a state-chartered stock S&L in Texas gave one "a license to steal."

One can draw an analogy between the policies pursued by many insolvent S&Ls and the insolvent FSLIC. Just as insolvent
S&Ls took great risk with the hope of becoming solvent, so did the FHLBB and FSLIC incur substantial risk with the hope of reestablishing a solvent deposit insurance system. The result turned out to be greater economic and financial costs to the financial system and to the economy as a whole.3/

Improved Performance

Following the decline in interest rates in 1982, S&L performance improved and, in the aggregate, the industry reported modest positive earnings in 1983 and 1984. When rates declined further in 1985, the industry appeared to be returning to respectable earnings, at least in the aggregate. However, reported earnings declined sharply in 1986 and became negative by the end of the year. Despite a year-to-year decline in the cost of funds for S&Ls, earnings continued to deteriorate throughout 1987 and, in the aggregate, the industry lost about $8 billion. These losses increased by about 50 per cent in 1988.

The earnings deterioration was primarily the result of asset quality problems (in some cases a belated recognition of those problems) which led to increases in loan losses and a reduction in interest margins because of the increase in non-performing assets. Hindsight suggests that earnings reported in earlier years were overstated through interest
accruals on loans that should have been placed on a non-accrual status and by inadequate loan loss provisions. 4/ In addition, it appears that many S&Ls had selectively sold higher yielding assets and used these gains to maintain positive earnings, while retaining lower yielding and lower quality assets in their portfolios. It should be noted that aggregate S&L income data mask considerable dispersion within the industry and can lead to understatement of the problem. For example, while two-thirds of the S&Ls were profitable in 1987 and earned $6.6 billion, the one-third that recorded losses for the year lost more than $14 billion.

The asset quality problems of S&Ls were importantly affected by the substantial weakness in residential and commercial real estate markets in Texas and other parts of the southwest. However, the deterioration also occurred as a result of the aggressive growth and lending policies pursued by S&Ls and a supervisory system that proved to be ineffective. The aggressive and unrestrained lending by S&Ls in Texas (including some out-of-state S&Ls) was a major contributor to over-expansion in Texas residential and commercial construction and to the extent of the subsequent decline.

Examination and Supervision

Historically, the Federal Home Loan Bank system relied
heavily on detailed regulations specifying what S&Ls could and could not do. Emphasis was placed on check lists and conditions that had to be met as opposed to evaluating the strength of borrowers and the quality of specific credits. If a loan had an appraisal and appropriate documentation, there probably was no basis for criticism. Indeed, it was probably considered inappropriate by the system for examiners or supervisors to criticize loans or S&L activities if there were no specific violation of the rules. When virtually all S&L loans were mortgages on single family homes, this behavior led to few problems and it probably was not much different than the treatment of such loans by commercial bank examiners.

Within the Home Loan Bank system, examination and supervision were separated. Examiners worked for the FHLBB (Washington based) and were largely information collectors. Follow-up supervision, when it occurred, was carried out by a separate staff employed by the FHLBs that rarely communicated directly with the examination staff. FHLB employees may have been reluctant to criticize and enforce rigorously since they were employed by a Board that was largely elected by supervised S&Ls.

In 1985 the FHLBB took steps to upgrade the examination and supervisory efforts of the Federal Home Loan Bank System. Some of the proposed increased staffing in 1985 and earlier was opposed by the Administration which exercised budgetary control
over FHLBB spending and sought to limit Government employment and to limit "unnecessary" regulation. This proved to be shortsighted policy. While supervisory standards within the Home Loan Bank system did eventually improve, the improvement came too late and to slowly to deal with emerging credit problems effectively. The quality and focus of S&L supervision contributed to the slow recognition of emerging credit problems and the failure to take appropriate remedial action.

The earlier focus of the Home Loan Bank system on making sure that rules and regulations were followed is very similar to the bank regulatory activities of many developing countries. Making sure that laws and rules are not violated does not assure that banks or thrifts are operating in a safe and sound manner. Checklists of rules may have a perverse effect by creating an illusion of appropriate behavior and soundness. Perhaps the most dramatic shortfall occurred in connection with construction lending on commercial real estate. Accounting rules permit interest accruals for several years during the construction period even though no cash payments are made to the lender. In a weakening real estate market interest may be accrued and loans may be considered performing even though close scrutiny will indicate that problems and likely losses are present. An examination process that failed to look at underlying credits was slow to pick up on such problems, and this especially occurred in connection with S&L supervision in the southwest.
III. Policies for Handling Failing S&Ls

The FSLIC, like the FDIC, traditionally used two methods to handle failing institutions: (1) insured deposits were paid by FSLIC which, acting as receiver, liquidated the assets of the failed institution and distributed collections among creditors; or (2) the failing institution was merged (sometimes after it was closed) into a healthy institution in a transaction in which FSLIC generally purchased some of the problem assets of the failing institution or otherwise provided assistance to the acquiring institution.  

S&L and bank failures are not subject to general U.S. bankruptcy law. Creditor priorities are absolute; i.e. general creditors (including depositors) are entitled to full payment before junior creditors and shareholders receive any payment. Since the deposit insurer assumes the creditor position of the depositors that it pays directly or indirectly (by arranging their assumption by another institution), it has substantial flexibility in arranging a merger or otherwise disposing of the assets of the failed institution.5/

It was generally cheaper for FSLIC to merge a failing S&L than to pay off insured deposits, especially since the overwhelming share of S&L liabilities were insured deposits. However, some insolvent S&Ls had mostly high cost deposits, a
poor public image and virtually no capacity to generate profitable business. Consequently, they had no franchise value. The cheapest solution in such a situation would have been to close the institution, pay off its depositors and liquidate or sell those assets that had any value. Such transactions, however, required sizable cash outlays, and the FSLIC was short on cash. Consequently, it used the deposit payoff method less frequently than pure cost considerations would have dictated. Sometimes the simplest transaction would have involved the removal of troubled assets, inserting cash to make up the net worth shortfall and merging the "cleaned-up" institution through a competitive bidding process. However, this type of transaction also required a significant cash outlay, and so it too was avoided by a cash-short FSLIC.

Income Maintenance. When S&Ls became insolvent in 1980 because of rising interest rates, FSLIC developed an arrangement whereby it agreed to pay an acquiring institution the difference between the earnings on a fixed-rate asset portfolio of the failed S&L and the "cost of funds" for S&Ls plus some defined added spread to cover non-interest operating expenses. The only major variable in this calculation was a cost of funds index that covered some agreed-upon statistical series that tracked deposit and borrowing costs for S&Ls nationally or in a particular region or State. This technique (frequently referred to as "income maintenance") was employed satisfactorily in many transactions by FSLIC and the FDIC.
Basically, the deposit insurer took the future interest rate risk on an existing fixed rate asset portfolio, assuring the acquiring institution that it would at least break even on that portfolio.

Since the cost of funds plus the defined spread was generally less than the prevailing market interest rate on long-term assets during the early 1980s, the present value cost of this transaction was less than the cost of liquidating the asset portfolio or paying the acquirer the difference between book value and market value on the portfolio. The transaction was cost effective on a present value basis: it would have saved money for the deposit insurer had interest rates remained constant. When interest rates and the cost of funds actually declined, the cost of the transaction to the deposit insurer declined appreciably.

The income maintenance arrangement also minimized immediate cash outlays. The acquirer got the benefit of the cash flow from the portfolio, which could be reinvested at market rates, and whatever other value existed within the failing S&L, and this was reflected in the pricing of the transaction.

Taxes and Geographic Expansion. FSLIC had other benefits it could offer ("sell") acquiring institutions. Certain of its cash payments to acquirers could be treated as tax-free
receipts. This lowered the transaction cost for FSLIC, but not for the government as a whole. Because not all potential acquirers were in a position to take full advantage of potential tax benefits, inclusion of such benefits in transactions actually reduced competitive bidding in many instances.

Some acquiring institutions were permitted to cross state lines and get into preferred markets that had been closed to them. Thus, in the early 1980s FSLIC could more easily dispose of failing S&Ls in California and Florida which were perceived to be areas of strong future growth. The FHLBB also found that it could sell entry into some markets if a healthy institution would agree to acquire a failing institution in a less desirable market. It should be noted, however, that perceptions of coveted markets (Texas) and undesirable markets (New Jersey) in 1980 changed dramatically a few years later.

The income maintenance and other arrangements that the FHLBB and FSLIC could offer kept the cost of merging insolvent S&Ls relatively low compared with the amount of their assets. However, the aggressive growth policies pursued by weak and insolvent S&Ls bid up the cost of deposits and reduced the spread between newly-acquired earning assets and deposits. This made new and existing income maintenance arrangements much less attractive to FSLIC. As interstate entry was given out more frequently, the value of that arrangement (which ceased to
afford exclusivity) diminished, and it was further diminished when certain interstate entry possibilities became possible for commercial banks. In addition, the serious asset quality problems that subsequently developed required different, more time consuming and expensive, arrangements. FSLIC developed other arrangements to keep its costs down. Some of these involved considerable risk, and they probably contributed significantly to future costs.

**Accounting and Capital.** Assets of acquired institution were marked to market and the discount was booked on the asset side of the balance sheet as good will. This was typically amortized over a very long period (30 years). The actual remaining life of the acquired assets was much shorter. As the assets approach maturity, their value approaches book value and this appreciation (accretion) is brought into current income. While these accounting adjustments boost current income, it sets the stage for reduced future income because good will would have to be amortized for many years after there ceases to be any offsetting income. When interest rates subsequently declined, the value of acquired assets appreciated and exceeded the price at which they were booked. The assets were sold by many S&Ls and "profits" were used to increase book capital (rather than to reduce good will), while the good will "hole" remained on the S&L's balance sheet.7/
In connection with some acquisitions the FHLBB agreed to arrangements whereby capital requirements would be waived or phased in over a considerable period of time, thereby inviting substantial leverage and risk taking. Sometimes FSLIC assistance that was supposed to cover some of the net worth shortfall of the acquired S&L was allowed to count toward satisfying regulatory capital. The accounting arrangements cited artificially boosted S&L performance and regulatory capital, and provided incentives for what otherwise would have been unattractive acquisitions. In some instances acquisitions with or without minimal FSLIC assistance kept marginal (acquiring) S&Ls solvent according to so-called regulatory accounting standards. While the apparent cost of the transactions was kept relatively low, risk was substantially increased. If immediate cost is the principal determinant of the best transaction and regulatory and accounting exceptions are permitted, then weaker institutions will almost invariably become the low bidders since they are exposing little real value to risk and are less concerned about the need to earn market returns on real net worth. In a sense, a variant of Gresham's law came into play as weak and insolvent bidders drove away stronger potential bidders.

**Phoenixes and Management Consignment.** The FHLBB merged groups of insolvent S&Ls which could not be readily sold (because of their location or FSLIC's limited resources) into so-called Phoenixes, and selected new boards of directors and
chief executives for the institutions. The institutions were generally directed to pursue conservative, low growth policies, straighten out operating deficiencies and eventually (with FSLIC assistance) merge or recapitalize in the market place. While there was considerable criticism of the program, particularly related to competition from "nationalized" institutions, the program probably prevented these institutions from adding to FSLIC's costs. The institutions in the program generally avoided the credit problems that occurred in other insolvent S&Ls that were allowed to remain open.

Subsequently, FSLIC developed a "management consignment" program in which the management of troubled and poorly run S&Ls was placed in the hands of other institutions or individuals. This was supposed to be a short-term program for damage control and for facilitating the sale of the institutions. However, in most instances the problem S&Ls were not sold quickly. Because the arrangements had not contemplated longer-term operation, operating plans and appropriate controls were not always put in place. Some managements actually pursued aggressive expansion policies. Some permitted the franchise to deteriorate as basic services declined. As a result, this program may have led to net deterioration in value. The kind of actions necessary to straighten out records and systems so that an institution can be sold in a few months are not necessarily the same actions that should be taken to preserve value over an extended period of time.8/
Income Maintenance on Nonperforming Assets. In FSLIC's last transactions it generally guaranteed a positive spread on nonperforming assets of insolvent S&Ls. Acquirers frequently were weak S&Ls or investors who made relatively small equity investments. That kept FSLIC's "apparent" costs lower than they would otherwise be because, as already noted, marginal institutions or investors were willing to pay a premium (in the form of lower assistance) to be able to operate with substantial leverage, allowing FSLIC (and ultimately the taxpayer) to take most of the risk. In most of these transactions FSLIC took an equity participation in the acquiring institution so that it would recover some of its costs if dramatic recovery occurs in distressed real estate markets.

Despite efforts to cut cost, estimated future costs of many of the later transactions (especially those in Texas) are very high -- in excess of 40 per cent of assets. This resulted from the poor asset quality of the acquired institutions which, in many case, should have been closed or merged much earlier. These transactions frequently encouraged acquiring institutions to hold non-performing assets for an extended period of time in order to realize market appreciation, since their carrying cost has been fully funded by FSLIC. However, the transactions discouraged rational sell-hold decisions and probably have had a perverse effect on bringing about appropriate adjustments in
real estate markets. Moreover, the transactions may have kept the important asset collection function out of the hands of more competent institutions.

These transactions contain substantial risk. It is not clear that, in the long run, they will prove to be cheap compared with transactions where adequate assistance was provided to well-capitalized acquirers — assuming adequate funding had been available to FSLIC. Certainly these transactions prevented the shrinkage in the aggregate size of S&Ls that would have otherwise occurred. And it is clear that these transactions distorted market conditions, made it difficult for well-capitalized institutions to compete, and made it virtually impossible to carry out effective supervisory policy.9/

Policies for Handling Failures: A Summary. In many respects the transactions and tactics used by FSLIC in order to dispose of failing S&Ls were imaginative and innovative. Some of them (taking on existing interest rate risk) probably reduced costs without creating other problems. Some arrangements (tax incentives) at best shifted costs from one pocket of government to another. The selective "sale" of exceptions to limits on geographic expansion tends to transfer costs to competing institutions in a manner that may be unfair. In addition, it may have actually delayed a salutary more universal elimination of barriers to geographic expansion. At
the same time that FSLIC and the FHLBB sought to achieve marginal cost reductions, they created enormous perverse incentives among weak and insolvent S&Ls: risk taking was encouraged; accurate reporting of financial conditions was discouraged; prudential standards were relaxed through accounting devices and capital forbearance; and the ultimate cost of the S&L problem was significantly increased.

During the early phase of FSLIC transactions (about 1980-83), S&Ls could earn favorable spreads on new money and portions of failing S&Ls were perceived to have considerable value. Subsequently, spreads narrowed and insolvent S&Ls offered very little to potential buyers. Nevertheless, FSLIC continued to structure transactions as though there were considerable franchise value in failing S&Ls, at least in part because more cash would have been required to do otherwise. The loss in S&L franchise value reflected increased competition in the deposit and mortgage markets and the development of mortgage-derivative instruments. However, the policies pursued by the FHLBB and FSLIC, which encouraged S&L growth and prevented S&L shrinkage, that would have otherwise occurred through the failure process, importantly contributed to the loss of value among S&Ls, including healthy S&Ls.
IV. FDIC Experience with Mutual Savings Banks

Beginning in the late 1970s the FDIC encountered interest rate related problems among the Mutual Savings Banks (MSBs) it insured and supervised, and these problems were very similar to those experienced by S&Ls at that time. While MSBs had broader asset powers than S&Ls, most MSBs, particularly those outside New England, had not used these powers to reduce their interest rate risk. In New York, where mortgage rates had been constrained by a state usury ceiling, MSBs had large portfolios of long-term corporate bonds whose duration (and, hence, interest rate risk) exceeded that of amortizing mortgages. In addition, mortgages of MSBs, which were on properties in slower growing states, turned over less rapidly than those of S&Ls which had a greater presence in the faster growing south and west. About half the assets of FDIC-insured MSBs were in New York state where the thrift interest rate problem was probably greater than anywhere else.

The FDIC had several advantages compared with FSLIC and the FHLLBB. In 1980 the FDIC's net worth was about twice as large as FSLIC's, and the 350 FDIC-insured MSBs accounted for only about 15 per cent of the FDIC's exposure. The institutions were relatively large and could be closely monitored by an ongoing supervisory staff, once the basic interest rate problem was identified. Commercial banks, which accounted for the remainder of the FDIC's exposure, had far
less interest rate risk. Thus, the FDIC was in a position to deal with the MSB problem more confidently and directly. While the problem could substantially reduce the FDIC's net worth, it did not seriously threaten its solvency -- unless interest rates continued to rise.

Beginning in December 1980 the FDIC arranged several assisted mergers for failing MSBs. For the most part these transactions provided "income maintenance" on most of the fixed rate portfolio of the failing institution. This served to eliminate the interest rate risk and operating loss on the fixed rate portfolio of the failing institution. The cost of these transactions was considerably less than the cost of liquidating the under-water portfolio of the failing institutions. While the FDIC continued to take substantial interest rate risk, this turned out to be a financial benefit when subsequent rate declines served to reduce the FDIC's cost significantly.

The average cost of the ten MSBs that were merged between 1980 and 1982 turned out to be less than ten per cent of their assets. For the most part, the transactions provided sufficient real assistance to acquiring institutions so that serious problems did not persist. However, there was some compromise to existing capital and supervisory standards. The most aggressive bidders for failing institutions were frequently other MSBs whose financial condition was not very
strong and, if rigorous qualifying standards for bidders had been enforced, would have been excluded. Faced with choosing between "cheap" transactions and more expensive ones with greater certainty about their success, the FDIC generally chose the former, and for the most part, got away with it. (In a few instances acquiring MSBs did get into difficulty and they currently are considered to be problems by the FDIC.) Failing MSBs generally were located in competitive banking markets that were not coveted by out-of-state institutions. As a result the FDIC could not benefit through the sale of regulatory exceptions as did FSLIC; nor did the FDIC have the authority to provide other entry opportunities in exchange for aggressive bids on institutions in less favored markets.

Banking legislation enacted in 1982 included a provision whereby thrift institutions approaching book insolvency could apply for "net worth certificates" (a paper exchange that would satisfy regulatory capital requirements) from the FDIC and FSLIC to cover a portion of their losses, and delay or forestall legal insolvency. The FDIC implemented the arrangement for virtually all eligible MSBs and, in the process, imposed significant restrictions on the policies of participating MSBs. They had to submit detailed operating plans which were monitored by the FDIC. Restrictions generally prevented the institutions from bidding aggressively for funds and acquiring risky assets. These arrangements, combined with the conservative behavior that characterized most MSBs and
healthy regional economies, generally kept the MSBs from getting into loan quality problems.

When interest rates declined after 1982 and again in 1985-86 most of the MSBs under the net worth certificate program returned to profitability. Many were subsequently able to strengthen their capital position through retained earnings and by converting to stock institutions. Some were merged or acquired by stronger institutions or investor groups without any FDIC assistance. Had interest rates not declined, most of the MSBs in the net worth assistance program probably would have ultimately failed. By limiting the expansion of these MSBs and the kind of assets that could be acquired, the FDIC limited its risk. The institutions involved in the program typically were reporting sizeable operating losses under existing accounting rules. However, if market value accounting had been employed, most of the institutions, while reporting a sizable insolvency, would have been operating close to a break even basis.11/ If interest savings from delayed cash outlays by the FDIC are factored in, the net worth certificate program probably afforded a positive expected return to the FDIC, assuming a flat interest rate scenario.

The FDIC's cost of handling failing MSBs was about $2 billion on institutions with assets of about $150 billion in 1980. On S&Ls with assets of about four times that size in 1980, the cost to FSLIC and the taxpayer is likely to be at
least 40 times as large as the MSB cost. While luck, institutional culture and regional economic performance all contributed to the difference in results, there is an overwhelming message or lesson from the different experience. Closing or appropriately constraining insolvent institutions is essential if the exposure of the deposit insurer is to be kept within reasonable bounds.

V. Recent Efforts to Resolve S&L Problem

In 1987 it became clear that FSLIC did not have sufficient resources to handle its insurance obligations in connection with failing S&Ls. Congress enacted legislation that provided a vehicle for the FHLBB to borrow approximately $10 billion over a three year period, and finance its obligation over a much longer period out of increased assessment income. However, by early 1988 it became apparent that the $10 billion supplement to FSLIC resources was going to be far short of its needs. "Consensus" estimates of these needs escalated from $30 billion to $50 billion to $75 billion throughout the year. However, the FHLBB was slow to acknowledge that FSLIC resources would be substantially short of ultimate needs. In its 1987 Annual Report (which did not go to printing before late 1988) the FHLBB maintained that it would have sufficient resources over the next several years to handle failing S&Ls and eventually attain solvency. 13/
The FHFB and FSLIC stepped up their activity in "resolving" insolvent S&Ls throughout the year, despite limited cash resources. This was done through the issuance of FSLIC notes (IOUs) and obligations for future cash and note payments related to income maintenance arrangements on non-performing assets. Many of the transactions were criticized in Congress and elsewhere because of tax benefits given to acquirers, modest capital requirements imposed and the inappropriate asset collection incentives in the transactions. By the end of 1988, FSLIC had closed or merged 230 insolvent S&Ls with assets of $114 billion at an estimated present value cost of $38.7 billion. The pace of activity was accelerated at the end of the year (after the election) and as certain tax benefits were scheduled to expire. In December alone 76 insolvent S&Ls were merged at an estimated present value cost to FSLIC of $17.4 billion. By the end of 1988 FSLIC's outstanding obligation in connection with transactions disposing of insolvent S&Ls were approximately $50 billion. Still a large number of insolvent S&Ls remained open.

Congress, while critical of the FHFB and FSLIC, was reluctant to address the S&L problem through new legislation in 1988, a presidential election year. Early in 1989 the new administration submitted a comprehensive legislative package to Congress that was designed to deal with the S&L problem over a period of several years. The legislation, in a form reasonably
close to the initial set of proposals, was enacted and signed into law in August 1989. The basic structure of that set of proposals and the emerging strategy for dealing with the S&L problem are discussed below.

**The Legislation.** Under the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (currently referred to as FIRREA), FSLIC is merged into the FDIC, although two separate deposit insurance funds will be maintained. FSLIC's previous obligations (about $50 billion) under "completed" transactions that involve future commitments would be assumed by the Federal government as would the cost of resolving existing S&L problems over the next several years. There would be tougher future regulation, supervision and enforcement for S&Ls with an increased role played by the FDIC and the Treasury -- the FHLBB would have a single administrator who would report to Treasury and be a member of an enlarged FDIC Board of Directors. Capital and accounting standards of S&Ls would become similar to those applicable for banks (following a phase-in period), and in some areas there would be modest curtailment of S&L powers. Deposit insurance assessments would be raised for both S&Ls and FDIC-insured banks. In general there would be greater capital and supervisory discipline imposed on S&Ls.

The need for S&Ls as separate institutions, subject to different regulation, supervision and tax laws from those
applicable to banks, has been questioned by many. Under the new regulatory environment it may be difficult for S&Ls to operate profitably, and stronger S&Ls may eventually convert to commercial banks. Nevertheless, S&Ls and the FHLBs would continue to exist, at least for the present.

At least as important as the institutional changes imposed on S&Ls is the developing strategy for handling existing S&L insolvencies. The comments that follow in this area reflect, in part, a reading of public statements by FDIC and Treasury officials, and Congressional debate leading up to enactment of FIRREA. 14/ At the outset those S&Ls that are most clearly insolvent (according to regulatory standards) were or are being placed into conservatorships under the direction of the FDIC. The institutions would cease making loans, other than the most risk free loans; operating expenses would be reduced; and data and other relevant information would be gathered to facilitate the sale of the institutions. In some cases, the S&Ls had already been subject to enforcement action that had limited their activities; in other cases, the conservatorships have probably served to limit risk and cut losses.

Insolvent S&Ls will be closed and then either liquidated or merged. In the later case, no special tax benefits will be available to acquiring institutions or investors. The latter will be expected to capitalize the acquisition in accordance with prevailing standards -- it is likely that there would be
few, if any, exceptions made with respect to the capital requirements imposed on investors or depository institutions acquiring insolvent S&Ls. Acquiring institutions will not be expected to assume expensive, purchased deposits or to acquire nonperforming assets. Thus, even merged S&Ls would be expected to shrink considerably. The transactions are expected to be relatively "clean." What is likely to be acquired through mergers or acquisitions will be principally performing assets and "good" or core deposits. Even on that basis, it is not expected that acquirers will pay substantial "premiums" for S&L franchises. In the present environment, it takes a relatively clean, well-run S&L to earn a market return on capital if the institution is appropriately capitalized. As the size and number of S&Ls shrink and competition from insolvent institutions disappears, margins may eventually increase to levels where potential acquirers will pay premiums for S&L franchises.

There are likely to be few, if any, special devices that will significantly reduce insurance costs (some existing interest rate risk might be taken by the insurer to encourage acquiring institutions to purchase performing assets and this may modestly reduce costs). For the most part it is recognized that in today's environment those arrangements that could reduce costs (like capital forbearance) entail substantial risk and, once their supervisory and other implications are factored in, they may not actually reduce expected costs. Moreover,
there is a strong aversion to repeating the mistakes that were recently made.

In most cases there is not a close link between S&L assets and liabilities -- depositors are not the principal borrowers from the institution. Even when depositors do obtain mortgages from local S&Ls, most mortgages are subsequently sold, securitized or otherwise repackaged so that they do not remain with the original lender. It is not necessary for an acquiring institution to be the collector of the assets of the insolvent S&L in order to retain customer deposits. In the case of troubled assets, particularly larger mortgages on commercial properties, there is apt to be little advantage in keeping the work-out operation within the acquired S&L. Better collection results can probably be achieved by providing appropriate incentives to institutions with expertise in real estate and collections. Thus, there are apt to be simple, relatively clean S&L transactions with the difficult asset collection task handled elsewhere. How effective that collection process is handled would importantly affect the ultimate cost of working through the S&L problem. Imagination will be important in providing collection arrangements where the insurer can share in the upside with private contractors.

Simple, clean S&L transactions should result in few repeat problems, minimize undesirable competitive results from assisted transactions and make it possible to implement uniform
and strict supervisory policy. There are currently about 2,900 S&Ls in the U.S. About 500 are clearly insolvent, and disposing of most of them will require federal outlays. Many other S&Ls currently are not viable institutions. They will probably have to merge or be recapitalized, and it would not be surprising if the S&L population is half its current number by 1995.

FIRREA provides $50 billion over three years to dispose of operating, insolvent S&Ls. If that figure is correct, cash outlays to effect transactions will be considerably higher since problem assets would be removed and sold over an extended period of time. Some provision exists to facilitate the additional, temporary funding. Many believe that the $50 billion figure is apt to prove low -- much will depend on interest rates and real estate recovery in the southwest. If there is a consensus estimate today, it is probably closer to a present value cost of about $60 billion. That is in addition to FSLIC's outstanding obligations on previous transactions, estimated to be about $50 billion on a present value basis. Thus, we are looking at a present value cost in excess of $100 billion. The actual budget outlays will be much higher because (estimates exceed $160 billion) because expenditures will be spread out over time so that future dollar outlays will be greater than present value costs. In addition, funding needed cash will result in future interest expenses. 15/ While some of this cost will be borne by future deposit insurance
assessments, the majority of it will be paid by general Treasury revenues.

In economic terms most of the $100 billion (or thereabouts) cost has already been incurred over the past several years. S&L losses have either been reflected in previously-reported losses or are buried in existing balance sheets. To the extent those losses reflect the financing of bad real estate or other projects or the wasting of resources, those costs have been incurred and the resources have already been wasted. The deposit insurance system was obligated to cover most of the losses, and, at least implicitly, the federal government stood behind the insurance system. Thus, over the past several years the federal government has incurred an (unbooked) obligation, most of which was not recognized in the reported budget deficit. From an economic standpoint the federal deficit was understated. Paying the bills will facilitate the closing of S&Ls, the assumption of their obligations and the disposing of distressed assets. However, it generally won't involve any significant real wealth transfers. Owners of insolvent S&Ls won't benefit. Insured depositors in insolvent S&Ls won't receive any more for their claims than they had previously anticipated.

Unfortunately, in presenting an otherwise satisfactory S&L package, the Administration and the press did not develop the point that most of the real cost has already been incurred and
that the economy has already paid most of the bill through wasted resources and unbooked obligations of the deposit insurance system and the Federal government. The Administration's proposals involved the creation of a new borrowing entity so that most of the cost of resolving the S&L problem would be kept off the federal budget. The majority in Congress favored more direct, on-budget, financing, and a last-minute compromise developed so that part of the cost is on the fiscal 1989 budget and much of the future cost is off-budget.16/

While the current cost estimates are inflated, $100 billion is still a lot of money. It is about two per cent of current GNP. It substantially exceeds all past earnings of thrift institutions in the U.S. And not included in the $100 billion figure are the depleted capital accounts of failed and operating thrifts and the adverse impact that the S&L problem has had on operating depository institutions, even well-run institutions. Thus, it is important that we gain an appreciation of what happened to S&Ls and why, and the concluding section of this paper the development of the S&L problem and its principal causes are reviewed along with an attempt to place them into perspective.
VI. Summary and Conclusions

In several important respects the institutional arrangements that characterized S&Ls represented a disaster waiting to happen. The combination of economic events in recent years and the government policies pursued assured that it would be a very large disaster. Prior to the late 1970s S&Ls were primarily mutually-owned institutions with limited management capabilities, limited investment options and virtually unlimited interest rate exposure. The industry was so closely tied to real estate activity that conflicts of interest and credit concentrations were accepted behavior. The regulatory-supervisory system in place was so closely tied to the industry that the system was severely handicapped in identifying problems and imposing appropriate discipline on S&Ls.

Beginning in the late 1970s interest rates increased substantially, reaching levels that were wholly unanticipated by regulators and economists alike. The borrow-short, lend-long policies of S&Ls caused substantial operating losses that depleted the modest capital levels existing in most institutions. On their own and with the encouragement of regulators many S&Ls pursued high growth policies that attempted to minimize the relative importance of low-yielding fixed rate mortgages in their asset portfolios. They also moved into riskier areas of lending, in part in response to
more permissive asset powers. While some S&Ls benefited from such policies, the industry as a whole did not. Funding costs were bid up, returns on quality assets were squeezed and overall asset quality deteriorated substantially, at least in part, because of the overly-aggressive lending by S&Ls. On a mark-to-market basis most S&Ls were insolvent in the early 1980s. It was in their "economic interest" to incur substantial risk in the hope of attaining solvency. The fact that virtually all deposits were fully insured and borrowings were secured, eliminated any significant creditor discipline from S&Ls. Virtually all the risk was assumed by FSLIC, the deposit insurer. Consequently, it was essential for FSLIC and the FHLBB to minimize insurance risk by closing insolvent S&Ls or, at a minimum, restraining their growth and assumption of additional risk.

For the most part supervision did not restrain S&L growth and risk, and eventually a large share of S&Ls began to face serious asset quality problems. These problems more than offset the benefits that arose when interest rates and funding costs eventually declined. Asset quality problems were exacerbated by fraud committed by S&L managers and customers. The absence of any real capital stake eliminated an important potential deterrent to fraud as did the poor quality of supervision. Moreover, the pressure on S&L managers to find high-yielding assets contributed to their being victimized by dishonest developers and other borrowers.
In many respects the policies pursued by FSLIC and the FHLBB in dealing with failing S&Ls also exacerbated the problem. Insolvent institutions were merged in transactions that provided capital forbearance, accounting exceptions and other arrangements that covered up weaknesses and further encouraged growth. This contributed to reduced margins and lower asset quality within the industry as a whole and undermined needed, tough supervisory policy. Many of the policies pursued to handle failing S&Ls were dictated by a shortage of cash and a desire to effect what were perceived to be cheap transactions. In the aggregate, however, costs were not contained and the policies pursued contributed to additional risk taking and losses.

Other factors also contributed to the S&L problem. Rising energy prices in the late 1970s and early 80s encouraged substantial expansion in residential and commercial real estate activity in the southwest and especially in Texas. S&Ls, including many from other parts of the country, invested heavily in these markets. They suffered severely when these markets subsequently deteriorated. However, it would not be altogether accurate to characterize S&Ls as passive victims of market developments. The aggressive lending policies of S&Ls in Texas and elsewhere contributed importantly to over-building and the extent of the subsequent decline.
Developments in deposit and mortgage markets in the 1980s made these markets far more competitive than they used to be so that favorable margins on low-risk retail activities of thrifts are no longer available. In today's markets it takes a very efficient, well-managed thrift institution to earn market returns on a risk-adjusted basis in the deposit-mortgage business. Some of the high growth policies pursued by S&Ls and their regulator contributed to over expansion in these markets and to the tough competitive environment that currently prevails. Changes in tax laws in 1986-87 diminished the attractiveness of certain kinds of real estate investments, and from the standpoint of problem S&Ls and those involved in selling distressed real estate these changes came at precisely the wrong time.

It took a special combination of factors to make the S&L problem as large as it currently is. Interest rate movements were substantial. Nevertheless, the FDIC's experience with MSBs suggests that the consequences of the interest rate problem did not have to result in enormous costs. The real estate decline in Texas was extreme. Nevertheless, weaknesses in regulatory and supervisory policies were major contributors to the problem. So too was a reluctance within the Administration and Congress to address the developing problems more forcefully and in a more timely manner. Allowing insured insolvent institutions to operate, grow and take on more risk was the major source of today's problem. One can readily find
points at which policy changes, and an earlier willingness to recognize the extent of the problem, and address it would have significantly reduced its cost.

While some aspects of the S&L problem may be unique to the U.S. system, one can readily find comparable situations in banking systems around the world, particularly in developing countries. Interest rates and asset prices have been quite variable in many of these countries, and financial institutions have often been constrained in their ability to diversify and hedge against risk. Prudential regulation and supervision frequently have been inadequate, and they have been subject to special pressures in connection with movements toward liberalizing the activities permitted to institutions that often lack experience in these new areas. In many cases a substantial portion of the banking system is insolvent, though institutions are permitted to operate and take on additional risk. In one way or another losses are borne by the economy and will be paid for by the general public. Still it is difficult for governments and banking authorities to acknowledge these losses and pursue policies that will bring an end to them, despite the fact that delay will raise costs and cause distortions in resource allocation as it has in the U.S.

Finally, in some areas the U.S. experience with respect to mortgage market innovations and the perfection of markets is
apt to be very foreign to the situation in many developing countries. However, some of the U.S. experience in these areas and the fallout from increased market perfection may be worth careful study by those in well developed financial markets, as well as those developing countries with more sophisticated and competitive financial systems.
TABLE 1

Selected Balance Sheet Data for FSLIC-Insured Thrifts
(Year-end data; $ amounts in billion)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Assets</th>
<th>Deposits</th>
<th>Borrowing</th>
<th>Capital**</th>
</tr>
</thead>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Regulatory</td>
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<tr>
<td>1970</td>
<td>4,365</td>
<td>170.5</td>
<td>141.6</td>
<td>10.8</td>
<td>11.9</td>
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<tr>
<td>1975</td>
<td>4,078</td>
<td>329.0</td>
<td>277.7</td>
<td>20.5</td>
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</tr>
<tr>
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<td>510.8</td>
<td>420.4</td>
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<tr>
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<td>4,039</td>
<td>566.7</td>
<td>459.5</td>
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</tr>
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<td>1980</td>
<td>4,002</td>
<td>615.3</td>
<td>498.7</td>
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<tr>
<td>1981</td>
<td>3,779</td>
<td>509.4</td>
<td>512.3</td>
<td>88.8</td>
<td>27.8</td>
</tr>
<tr>
<td>1982</td>
<td>3,343</td>
<td>686.2*</td>
<td>550.0</td>
<td>97.8</td>
<td>25.3</td>
</tr>
<tr>
<td>1983</td>
<td>3,183</td>
<td>814.6</td>
<td>667.4</td>
<td>98.4</td>
<td>32.8</td>
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<tr>
<td>1984</td>
<td>3,136</td>
<td>977.5</td>
<td>784.5</td>
<td>137.9</td>
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<td>3,246</td>
<td>1,069.5</td>
<td>844.0</td>
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<tr>
<td>1986</td>
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<td>1,165.3</td>
<td>890.3</td>
<td>196.5</td>
<td>53.1</td>
</tr>
<tr>
<td>1987</td>
<td>3,147</td>
<td>1,250.9</td>
<td>932.6</td>
<td>249.9</td>
<td>46.4</td>
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<td>1988</td>
<td>2,949</td>
<td>1,351.5</td>
<td>971.5</td>
<td>299.2</td>
<td>56.4</td>
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* Beginning in 1982 certain loan reserves (about $15 billion in 1982 were subtracted from assets. In previous years these reserves were shown as liabilities.

** Regulatory capital includes qualifying subordinated debt, net worth and income capital certificates, and certain other items. Tangible net worth excludes these, deferred loan losses and good will. 17/

Data are from various Federal Home Loan Bank Board sources.
**TABLE 2**

Interest Rates, Interest Income, Expenses & Earnings of S&Ls

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Market Return</th>
<th>Interest Rates</th>
<th>S&amp;L Cost of Funds</th>
<th>S&amp;L Mortgage Yields</th>
<th>S&amp;L Yields on Assets</th>
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<td>3-mo. Bills Mortg Yields</td>
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<tr>
<td>1976</td>
<td>4.99</td>
<td>9.75</td>
<td>6.38</td>
<td>8.00</td>
<td>0.63</td>
</tr>
<tr>
<td>1977</td>
<td>5.27</td>
<td>8.97</td>
<td>6.44</td>
<td>8.26</td>
<td>0.77</td>
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<tr>
<td>1978</td>
<td>7.22</td>
<td>9.49</td>
<td>6.67</td>
<td>8.50</td>
<td>0.82</td>
</tr>
<tr>
<td>1979</td>
<td>10.03</td>
<td>10.71</td>
<td>7.47</td>
<td>8.86</td>
<td>0.67</td>
</tr>
<tr>
<td>1980</td>
<td>11.62</td>
<td>12.67</td>
<td>8.94</td>
<td>9.34</td>
<td>0.14</td>
</tr>
<tr>
<td>1981</td>
<td>13.92</td>
<td>14.74</td>
<td>10.92</td>
<td>9.91</td>
<td>-0.73</td>
</tr>
<tr>
<td>1982</td>
<td>10.74</td>
<td>15.12</td>
<td>11.38</td>
<td>10.68</td>
<td>-0.65</td>
</tr>
<tr>
<td>1983</td>
<td>8.62</td>
<td>12.68</td>
<td>9.83</td>
<td>11.17</td>
<td>0.27</td>
</tr>
<tr>
<td>1984</td>
<td>9.70</td>
<td>12.52</td>
<td>10.03</td>
<td>11.65</td>
<td>0.12</td>
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<td>1985</td>
<td>7.54</td>
<td>11.58</td>
<td>9.19</td>
<td>11.52</td>
<td>0.39</td>
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<tr>
<td>1986</td>
<td>5.97</td>
<td>10.25</td>
<td>8.06</td>
<td>10.65</td>
<td>0.02</td>
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<tr>
<td>1987</td>
<td>5.82</td>
<td>9.32</td>
<td>7.20</td>
<td>9.70</td>
<td>-0.64</td>
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<tr>
<td>1988</td>
<td>6.67</td>
<td>9.20</td>
<td>7.50</td>
<td>9.65</td>
<td>-0.96</td>
</tr>
</tbody>
</table>

S&L data from various Federal Home Loan Bank Board Sources 17/
1. For several years officials at the FHLBB and others have argued that states irresponsibly expanded powers for state-chartered S&Ls (insured by the FSLIC) and that federal regulators were powerless to restrict their behavior. In fact the FHLBB had substantial authority with respect to determining minimum capital standards for all FSLIC-insured institutions (as do bank regulators for banks). Capital requirements can and have been related to the mix of assets and liabilities. The FHLBB had authority to set higher capital requirements on equity investments, direct real estate investments or on other selected "risky" assets.

2. During the same period borrowing by FSLIC-insured S&Ls increased by more than 350 per cent. Borrowed funds, virtually all of which are secured, currently account for about 23 per cent of the liabilities of FSLIC-insured S&Ls.

3. It is easier to defend the risky behavior of insolvent S&Ls. If they were extremely successful, they might become solvent again and remain in business. If they were stock institutions, their shareholders would benefit. If they were unsuccessful, losses would fall on the FSLIC. The FHLBB and FSLIC were public institutions. Their losses were public losses.

4. During most of the past decade the income reports of troubled S&Ls do not fully reflect their unfavorable performance. Troubled institutions tend to be slow in reporting loan losses. Selective asset sales permit institutions to report "gains" while they continue holding asset portfolios with below average yields. If one focused solely on income reports, he would estimate a much smaller S&L problem than has actually existed.

5. The combination of clear-cut creditor priorities, the deposit insurer standing in the role of general creditor and courts that are reluctant to delay transactions because of frivolous creditor challenges facilitate quick acquisitions of failing banks and S&Ls. In addition, the FHLBB and FSLIC had considerable authority to arrange mergers or acquisitions of failing mutually-owned S&Ls without actually closing them.

6. Where there is an actual pool of mortgages and bonds that may pre-pay or default, the yield and the size of the portfolio could vary from the original agreement. The FDIC in using this type of transaction found that it could replicate the size (utilizing pre-payment assumptions) and yield on a long-term portfolio in what it called a "defined asset base." The acquiring institutions was then free to hold or sell off any part of the portfolio without affecting the assistance
transaction. This simplified record keeping. In addition, the flexibility afforded the acquiror added value to the transaction (it was not a zero sum situation) that could be reflected in the bidding process, and reduce the FDIC's cost.

7. Acquired assets were booked at current market value which generally was below the original book value. The difference between book and market was good will which showed up as an "intangible" asset to be amortized over a long period. As acquired assets approached maturity, assuming constant interest rates, they would appreciate in value and this appreciation was taken into current income. Because the assets matured faster than the write off of good will, this tended to boost early-year earnings. However, when interest rates declined, the acquired assets appreciated further. Many S&Ls sold the assets in order to boost current earnings. However they were left with substantial good will on their books without any future accretions to offset the write off of future good will.

8. Over an extended period of time, quality staff, faced with limited and uncertain future prospects will leave. While it may be appropriate to limit new lending, failure to lend over an extended period of time will reduce any franchise value in the institution. Legal and other action to perfect property liens and maintain value in troubled assets require a relatively long time horizon, and failures in these areas can dissipate asset value. These are only a few examples of potential problems associated with extended holding actions. They are not unique to the "management consignment" program. They are apt to occur in any situation where a failing depository institution is placed in prolonged holding status -- a process that is not uncommon in some banking systems.

9. Transactions that paid off high cost deposits or otherwise led to shrinking the balance sheet of problem S&Ls would have led to lower funding costs for competing S&Ls. The latter also had to face competition from institutions that were permitted to operate with low capital ratios and could afford to price assets and liabilities accordingly. Supervisors had difficulty enforcing capital requirements for solvent S&Ls at the same time that assistance transactions condoned lower capital ratios.

10. In several instances interest rate declines reduced costs considerably compared with original present value estimates. At the time 10 per cent seemed low compared with the market value net worth of the institutions. However, 10 per cent was not so low compared with the FDIC's pre 1980 commercial bank experience. It was low, however, compared with the FDIC's post 1982 experience.

11. A bond or mortgage, acquired at par with a coupon or interest rate that is significantly below market will produce low interest earnings earnings throughout its remaining life.
If the mortgage is marked to market based on current interest rates, a loss will be immediately recognized. However, a larger share of future amortization payments will show up as current interest income. In the case of the bond, once the loss is realized, that discount will be accreted and be brought into current interest income as the bond approaches maturity. These market value adjustments bring the income statement more in line with "economic income," and they afford a more appropriate basis for determining whether an institution should be closed or kept alive.


14. The writer has participated in FDIC planning efforts related to the handling of failing S&Ls and the comments that follow reflect the consensus of the participants within and outside the FDIC.

15. This figure does not include previous costs that were already paid, including the depletion of FSLIC income and accumulated net worth and paid in capital of failed and failing S&Ls.

16. Twenty billion dollars of the cost of resolving S&L problems are to come from outlays charged to the fiscal 1989 budget year (which ends September 30, 1989). Under present practices, late adjustments to the budget are not considered to be violations of constraints imposed on the federal deficit.

17. It should be appreciated that S&L data on earnings (which affect capital) have been reported more favorably than they should have been. Accounting rules have permitted over statement of earnings; gains on asset sales have been realized quickly while losses are deferred; and many S&Ls have understated loan losses.
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