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FEDERAL DEPOSIT INSURANCE CORPORATION

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DEPOSIT INSURANCE FOR THE NINETIES: MEETING THE CHALLENGE
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A Staff Study
Federal Deposit Insurance Corporation

January 4, 1989

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EXECUTIVE SUMMARY

This report, "Deposit Insurance for the Nineties: Meeting the Challenge," reviews the federal deposit insurance system. The FDIC undertook this review because of a growing realization that deposit insurance requires some fundamental changes if it is to continue to serve the purposes for which it was originally intended over 55 years ago.

Virtually all agree that deposit insurance has accomplished its basic goals of maintaining stability and confidence in the banking system, and that these goals are vital to our Nation's economy. Deposit insurance has helped ensure a sound banking system by providing a safe haven for people's money, thereby instilling confidence and preventing panic-driven bank runs. Deposit insurance also has helped maintain a flexible and responsive banking system by facilitating a decentralized structure where new and smaller banks can compete against larger institutions.

While deposit insurance has provided many social and economic benefits, the events of the last decade have brought into clear focus the fact that the deposit insurance system also has the potential to create staggering costs. Simply put, federal deposit insurance allows thousands of institutions to leverage their capital with federally guaranteed funds--deposits. Imprudent decisions by only a relative handful of financial institutions can generate enormous losses for the deposit insurer. Strong supervision and market

discipline are critical to keeping in check the risk-taking incentive created by this structure.

Deposit insurance should be self-funding--premiums collected and invested should be sufficient to cover costs of operation. The system worked well in the days when competition was limited and the economy and interest rates were relatively stable--before technological changes and global competition. Now, the business of the deposit insurer is more complex and, often, more costly.

The FDIC fund declined by 20 percent in 1988--its first operating loss ever. While the FDIC expects to make an operating profit in 1989, changes are necessary to ensure that future operations are sound. The potential costs of deposit insurance are even more obvious in our sister insurance agency, the Federal Savings and Loan Insurance Corporation (FSLIC), where hundreds of thrifts are insolvent and even the most optimistic estimates of resolution costs greatly exceed the fund's and the thrift industry's resources. Our Study looks at the FDIC's recent experience, and that of the FSLIC, and explores various alternatives and improvements to deposit insurance. The Study concludes that certain principles are required to provide a sound deposit insurance system.

First, the deposit-insurer should be made as financially and organizationally independent as possible. The insurer must be sensitive to the concerns of chartering authorities and the industry it insures, but it must have the freedom to control costs. To ensure political independence, the

insurer should be self-funded. It should have a budget separate from the general federal budget and the insurer should not be allowed to obligate federal revenues. The insurer also should be independent from the Congressional appropriations process. The insurer should remain accountable to Congress and the Administration, yet remain free from annual budgetary controls.

Second, the federal deposit insurer must be given certain basic tools that would be available to a private insurer to control costs. These include: The ability to promptly terminate insurance privileges when an institution is operating in an unsafe manner; the ability to set standards for insurability by a federal deposit insurance system; and the authority to examine and assess risk at all insured institutions.

Third, to ensure adequate resources, the insurer should have additional controls over its revenues. The insurer should be able to adjust insurance premiums, within prescribed limits, to reflect experience and costs on a continuing basis. The assessment base should be extended to include borrowings that are secured by assets that otherwise would be available to the insurer in the event of failure. Operating institutions obtaining federal insurance should be required to pay an entrance fee sufficient to maintain the ratio between the insurance fund and insured deposits. The insurer also should be able to borrow from both the Department of the Treasury and the Federal Reserve. Moreover, all federally insured institutions owned by a common parent should be required to indemnify the insurer against any losses resulting from the failure of an affiliated bank.

The Study also offers other recommendations. The FDIC should have clear authority to distinguish between depositor and nondepositor claims in failure-resolution transactions. This approach differs from previous calls for depositor preference statutes in that nondeposit creditors would maintain their pro rata rights to the assets of the failed institution. Such creditors may have to wait along with the FDIC for assets to be liquidated, while depositor liabilities could be transferred to another institution.

In addition, the FDIC continues to advocate moving toward a system in which nontraditional activities take place outside the bank in subsidiaries using excess bank capital or in separately capitalized affiliates. Under such conditions, the FDIC recommends that banking organizations be allowed to become involved in a wide variety of activities.

Finally, the experience of the past several years demonstrates that regulatory agencies must improve their supervisory capabilities. Regulatory agencies must maintain highly skilled, professional staffs. In addition, regulators must improve their understanding of risk diversification and the competitive and economic environments in which their banks operate.

The Study reviewed other proposals for improvements to the system. A fundamental conclusion is that proposals to increase so-called depositor discipline by curtailing insurance protection should be rejected. The FDIC's view is that increasing pressure on depositors to control bank risk in a rational manner is impractical. Most depositors looking for safe, short-term investments cannot be expected to know the true condition of a financial institution. That is challenging enough for examiners and analysts who have

regular access to bank management and records. Most importantly, attempts to increase depositor discipline would increase the threat of financial instability and bank runs, and undermine the very reason deposit insurance was deemed necessary.

The FDIC also rejects so-called "narrow-bank" proposals that would restrict depository institutions to only the most liquid and safe investments. Forcing lending operations out of banks, which would be required by these proposals, would be inefficient in view of banks' considerable expertise in financial intermediation. Further, these types of proposals may restrict the flow of credit to productive investment projects undertaken by borrowers who lack the ability to tap credit markets directly, thereby reducing overall economic growth.

While the FDIC rejects decreasing depositor protection, it cannot support proposals to increase de jure depositor protection to 100 percent. Although the discipline exerted by large, uninsured depositors is not necessarily an ideal form of discipline--large depositors often run only after it is apparent that the bank is encountering difficulties--it does provide some deterrent effect, and often alerts regulators to problem situations or forces a more timely resolution of failure situations. To completely eliminate such discipline would increase the potential risk to the insurer.

Arguments to raise or lower depositor protection also stem from the perceived inequity in the way large banks are handled relative to small banks. The FDIC acknowledges that some inequity does exist. Uninsured depositors in very small banks sometimes bear somewhat greater risk of loss

than those in large banks. Under current law, the FDIC must determine that protecting uninsured depositors is cost-effective in failure resolutions or that factors exist that make it essential to protect uninsured depositors. Experience shows that protecting all depositors is more likely to be cost-effective in larger banks because of the greater relative franchise value maintained in large banks. The FDIC can deviate from the cost test when a bank is found to be essential to its community--but such essentiality considerations are more likely to exist with larger banks than smaller institutions. To address this inequity, the FDIC will continue its practice of trying to avoid depositor losses whenever possible.

The Study concludes that, on balance, the current deposit insurance system provides an appropriate balance between depositor discipline and financial stability. Our view is that risk-taking incentives created by deposit insurance can be controlled by ensuring market discipline by investors, management, and uninsured depositors; requiring banks to hold adequate capital; improving the regulatory structure; and strengthening the supervisory process.

While studying deposit insurance, the FDIC reviewed the problems facing its sister insurance agency--the FSLIC. The most obvious problem is to provide funding so that hundreds of insolvent institutions can be resolved. It appears the federal government will have to absorb much of this cost, since the thrift industry is not strong enough to shoulder the burden alone. Moreover, the FDIC finds no reason why banks should be singled out to pay for the thrift industry's problems. The Study reviews proposals for ameliorating

the impact on the federal deficit of the costs of returning the FSLIC to solvency.

Equally as important as arranging for adequate funding is taking steps to ensure that current losses do not recur. Many of the recommendations for deposit insurance reform discussed earlier are necessary for a viable and responsive insurance system. There are a variety of alternatives for implementing these reforms for the FSLIC. The Study recommends three possible options that satisfy the requirements set forth above: (A) A new stand-alone FSLIC; (B) An administrative merger of the FSLIC into the FDIC; and (C) Comprehensive reform of the thrift regulatory structure. The FDIC favors option A.

A stand-alone FSLIC envisions the creation of a separate FSLIC that is independent of the Federal Home Loan Bank Board (FHLBB). The FHLBB would continue to charter and supervise federal thrift institutions and would operate both the Federal Home Loan Bank System and the Federal Home Loan Mortgage Corporation (Freddie Mac). The newly-separated FSLIC would directly supervise all state-chartered, FSLIC-insured thrifts and be responsible for all liquidation activities related to all FSLIC-insured institutions. The FSLIC would not be subject to the appropriations process. The district Federal Home Loan Banks (FHLBs) would no longer examine or supervise thrifts. Their role would be confined to providing liquidity for institutions meeting housing-related criteria. System membership would be available to any depository institution meeting these criteria.

The second option is an administrative merger of the FSLIC into the FDIC. There would be common management and an administrative Board over separate FDIC and FSLIC funds. The new FDIC would supervise state-chartered thrifts and state-chartered banks that are not members of the Federal Reserve System and would perform all liquidation activities for all insured banks and thrifts.

The third option calls for comprehensive reform of the thrift deposit insurance and regulatory structure. The administrative functions of the FSLIC and the FDIC would be merged into a new corporation. The Office of the Comptroller of the Currency (OCC) would assume responsibility for chartering and supervising federal thrifts, and the Federal Reserve Board would supervise thrift holding companies. The FHLBB would continue to oversee the Federal Home Loan Bank System and Freddie Mac, under the umbrella of the Department of Housing and Urban Development or the Federal Reserve Board.

These are the major conclusions and recommendations in our Study. A summary of the discussion in each chapter follows.

Introduction

Chapter 1 provides a brief introduction to the FDIC's examination of our federal deposit insurance system. Concerns about the continued viability of the deposit insurance system stem from the economic, technological and regulatory changes that have affected our economy's financial markets over the

past decade. Deposit insurance reform was examined at length following the financial deregulation of the early 1980s. In general, these studies found that the regulators' ability to control excessive risk-taking had been hampered by the changing financial environment.

Today, deposit insurance reform continues to receive attention. Proposals to modify the system range from a major scaling back of insurance guarantees and greater depositor discipline, to increased emphasis on capital requirements, supervision and timely closure of insolvent institutions. This Study examines the current system and recommends changes to enable the deposit insurance system to meet the challenges ahead.

Framework for Analyzing Deposit Insurance Reform

Chapter 2 reviews the benefits and costs associated with the provision of deposit insurance and provides a framework for analyzing deposit insurance reform. Deposit insurance promotes financial stability by preventing bank runs. However, deposit insurance also may create an incentive for banks to take excessive risks. (While the owners of insured deposits have little incentive to participate in bank runs, they also have little incentive to pay attention to the riskiness of their bank's activities.) These two fundamental effects of deposit insurance, and the relative importance one may attach to them, underlie all of the numerous proposals to replace, curtail, or otherwise reform deposit insurance.

Comprehensive deposit insurance reform tends to be favored by those who take the view that the benefits associated with the prevention of bank runs

are less important than the costs associated with the risk-taking incentives created by deposit insurance; or that the costs associated with bank runs can be controlled adequately by alternatives to deposit insurance.

Proponents of more modest reform take the view that the more significant costs are associated with bank runs, and that risk-taking incentives created by deposit insurance can be controlled adequately through market mechanisms, capital requirements and the supervisory process. The FDIC's view falls into this category.

Deposit Insurance Pricing

In Chapter 3, "Deposit Insurance Pricing," problems associated with the current flat-rate pricing scheme and the feasibility of implementing a system of explicit risk-related premiums are addressed. In the absence of regulation and supervision, flat-rate premiums provide incentives for excessive risk-taking and inequitably distribute the burden of insurance losses among banks. If unchecked, these perverse incentives may lead to an excessively risky banking system and undermine the viability of the deposit insurance system.

In practice, this incentive toward excessive risk-taking is counterbalanced, to some extent, by existing market discipline and through regulation and supervision. Federal and state regulators periodically examine banks to determine if they are operating in an unsafe or unsound manner. Undesirable behavior is penalized through the issuance of cease-and-desist

orders or the imposition of other sanctions. In addition, laws and regulations limit the kinds of activities that insured institutions may engage in and set minimum capital requirements. To the extent that these implicit costs vary with the riskiness of the bank, they function as a system of risk-related premiums and constrain risk-taking.

The major question is whether an explicit risk-related pricing formula could be established that would be an improvement over the current system of flat-rate premiums, regulations and supervisory sanctions. In assessing this question, a number of risk-related pricing schemes are reviewed. Risk-related schemes that rely on market information to assess bank risk generally suffer from problems in obtaining accurate market information for all insured institutions. In the absence of a market-based approach, the FDIC would be left with the task of administratively determining an explicit pricing formula. Thus far, it has not been possible to establish a satisfactory pricing formula based on ex ante or before-the-fact measures of risk.

It does appear feasible, however, to establish a general pricing formula that would complement the existing supervisory sanctions, based on ex post or after-the-fact measures of risk. The adoption of such a system, with only modest premium differentials at first, will not eliminate entirely the incentive for banks to take excessive risks. However, it may offer somewhat greater deterrence, require regulators to assess risks more diligently, and allocate the costs of insurance more equitably among banks.

While a more equitable distribution of the insurance burden is desirable, an even more critical concern is to ensure adequate funding for the

insurance agency. An adequately financed deposit insurance system is important for three reasons. First, an insolvent insurer has similar incentives to take excessive risks as does the management of an insolvent insured depository; this helps to explain the actions of the FSLIC in the early 1980s in encouraging thrifts to grow out of their problems by further leveraging nonexistent capital. Second, the passing of expenses and losses to the industry on a more current basis will provide greater incentives for the development of self-regulation and mutual risk-reduction measures. Finally, Congress and the public have every right to have assurances that the need for taxpayer money in the future will be minimal.

To help ensure adequate long-run funding for the insurer, several recommendations are presented in Chapter 8. First, total assessments to the industry should be based on a modified three-year average of actual loss and expense accruals. Limits may be appropriate for year-to-year changes in assessments and for the maximum level of assessments.

Second, the assessment base should be expanded to include secured borrowings. While there are good arguments for also including foreign deposits in the assessment base, there is sufficient uncertainty with respect to its effects on the competitive position of U.S. banks that no recommendation is made at this time.

Third, the rebate system should be based solely on the relationship of the fund to the assessment base. Rebates would begin when the ratio of the fund to the assessment base exceeded a threshold level.

Fourth, the FDIC should be given direct authority to borrow from both the Department of the Treasury and the Federal Reserve System.

Finally, operating institutions obtaining FDIC insurance should pay an entrance fee sufficient to maintain the ratio of the fund to the assessment base at a constant level. This could be accomplished through a one-time charge or a deposit that is taken into the fund over time.

Market Mechanisms for Controlling Risk

Chapter 4, "Market Mechanisms for Controlling Risk," examines market discipline as a form of risk control in banking. Market mechanisms for controlling risk are considered under four broad categories: insurance coverage (depositor discipline), disclosure, capital standards, and the priority of claims in bank liquidation (depositor preference and nondepositor discipline).

Based on the premise that de facto 100 percent coverage has rendered depositor discipline ineffective, some have argued for explicit, 100 percent coverage of deposits, regardless of size. Full coverage, it is argued, could result in greater stability with respect to bank runs, more equity in the system, and also could allow for a more consistent and orderly resolution of bank failures. Moreover, 100 percent coverage may facilitate certain changes in failure-resolution methods that, according to proponents, would increase the effective level of market discipline. The major problem with this argument is the assumption that depositor discipline is completely absent from

the current environment. The FDIC's experience suggests otherwise and recent studies also contradict this, suggesting that markets for certificates of deposit are fairly sensitive to bank-specific risk and act to constrain banks wishing to pursue riskier activities.

Others have argued that there should be greater depositor discipline; that deposit insurance coverage levels perhaps should be reduced from the present \$100,000 level; and that in order to control bank risk-taking, uninsured deposits should be exposed to losses in bank failures. However, the problem with depositor discipline is the same one that existed in the 1930s, which led to the creation of the federal deposit insurance system: depositor discipline can lead to destabilizing bank runs.

What proponents of greater depositor discipline often overlook is that market discipline presently exists in many important respects. Bank stockholders, bank management and bank holding company creditors almost always suffer losses when a bank fails. Each of these groups has an incentive to control a bank's risk-taking. Uninsured depositors and creditors also exert some control over bank risk-taking, since they are not assured of complete protection in a bank failure.

Chapter 4 concludes that existing levels of market discipline appear adequate to control risk-taking by healthy banks. The Study recommends against any change to the \$100,000 limit for individual deposit accounts. Limits to insurance coverage on brokered deposits or restrictions on the rates payable for insured brokered funds also are viewed as unnecessary. However, market discipline cannot be relied on to control risk-taking in problem

institutions. As a bank nears insolvency, the incentive for self-preservation may lead unprotected creditors and bank management to encourage the very risk-taking that is viewed as imprudent when the bank is healthy. As a bank's condition deteriorates, less reliance can be placed on market mechanisms and more reliance must be placed on the supervisory process.

Supervision

In addition to market discipline, supervision is the other major vehicle for controlling bank risk-taking. Rather than diminish its role, deregulation and other changes in financial markets have made the supervisory role even more critical. In Chapter 5, "Supervision," the role and effectiveness of the supervisory process are examined and recommendations for reform are put forth. Three major areas of the supervisory program are reviewed: the examination program, enforcement authority, and applications process.

The examination program is the primary mechanism for monitoring the risk of individual institutions and for implementing necessary corrective actions. Several areas are identified as needing reemphasis or improvement.

First, because the FDIC's resources are at stake, the authority for the insurer to examine all insured banks needs to be clarified and strengthened.

Second, the regulatory agencies must improve their methods of identifying risk, setting priorities and allocating resources. This

includes: (a) improved offsite monitoring through continued development of computer-assisted analyses of bank and industry data; (b) development of online information-retrieval systems which will allow regulators computer access to at least the top tier of banks and those that exhibit more than normal risk; (c) development of diversification rules and systems and programs for analyses of industry sectors and geographical groupings in a way that will help focus supervision on potential or emerging problems; and (d) coordination of the information-gathering processes to more systematically establish priorities for onsite examinations of banks that still have satisfactory ratings.

Third, federal bank regulatory agencies must reemphasize and develop better ways to work together and streamline the examination process and information flows between agencies. This includes a rejuvenation of the cooperative examination program whereby the FDIC accompanies the OCC and the Federal Reserve Board in examinations of banks, and the consideration of issuing regional supervisory directives, i.e., alerts to examiners and bankers concerning a local or regional problem that need not wait for a nationwide pronouncement from the Washington offices.

Fourth, an effective examination program is dependent on maintaining a staff of highly skilled, experienced and well-compensated professionals. This means avoidance of periodic hiring freezes, maintenance of a benefits package that is competitive with the private sector, and development or acquisition of specialized expertise to deal with new and changing banking activities.

Finally, the supervisory program could be enhanced by establishing regional economic oversight committees comprised of representatives from different supervisory agencies to evaluate levels of risk in their respective areas. These committees would consult with industry and academic representatives and should seek to anticipate adverse economic trends.

When a bank does not operate in a safe-and-sound manner, regulatory authorities must possess the necessary tools to curb improper behavior. While existing enforcement tools are generally adequate, expanding their applicability and streamlining their implementation would be helpful to the enforcement process. Several recommendations are made.

First, termination of federal deposit insurance should be streamlined to take no more than six months. Existing deposits would continue to be insured for a reasonable period following termination.

Second, clarify restrictions that could be imposed on banks with capital levels below minimum standards. These might include suspension of dividends, restrictions on growth and a prohibition on acquisitions.

Controlling and monitoring risk through the supervisory process also could be enhanced by modifications to the applications process. At present, only state nonmember banks are required to apply to the FDIC for entry into the deposit insurance system. National and state member banks receive FDIC membership automatically upon approval of the OCC or the Federal Reserve. When granting a charter, the chartering authorities should be required to

consider the institution's risk to the insurance fund, using standards developed by the insurer.

Forbearance

Not only does deposit insurance reform require decisions on how much authority to grant bank supervisors, it requires decisions on the amount of discretion to be allowed the supervisor in the exercise of that authority. The trade-off between mandatory rules versus supervisory discretion underlies the discussion in Chapter 6 on "Forbearance." This chapter argues that there are circumstances where it may be appropriate for supervisors to exercise discretion in the face of excessive risk exposure by insured depository institutions; mandatory or rigid enforcement rules in some instances may undermine supervisory efforts to control risks. In this context, forbearance should be a deliberate act aimed at achieving control of risk, rather than the consequence of inaction or unwillingness to address problem situations. Many forms of forbearance have been successful in controlling risks, promoting sound operations, and limiting loss to the insurance fund. Chapter 6 argues that the ability to exercise discretion is an important and, in fact, a necessary part of the supervisory process.

Failure Resolution

Chapter 7, "Failure Resolution," reviews alternative failure-resolution policies and evaluates their desirability in terms of how well they meet major

policy objectives. As discussed elsewhere, a trade-off exists between the desire to maintain market discipline against bank risk-taking and the need to maintain public confidence and stability in the banking system. There appears to be substantial market discipline against risk-taking by healthy institutions. It is when a bank encounters financial difficulty that market discipline fades and the incentive to take risks becomes significant. These risk-taking incentives in problem institutions mean it is critical to maintain strong and effective supervision, which includes enforcement of appropriate capital standards and a general policy that calls for timely closure of insolvent institutions.

The view that the trade-off between stability (the prevention of bank runs) and depositor discipline must be weighted heavily in favor of stability is the driving force behind the first two recommendations in Chapter 7. First, because market discipline declines as capital levels decline, timely closure of insolvent institutions is a critical element in controlling risk. Further, since loan-loss reserves represent anticipated losses, it should be clarified that chartering authorities should use equity capital rather than a capital measure that includes loan-loss reserves as the appropriate measure for determining solvency. Second, it would be desirable for the FDIC to have clear authority to distinguish between depositor and nondepositor claims in failure-resolution transactions. Such authority would give the FDIC greater flexibility to increase nondepositor discipline against bank risk-taking without risking greater instability in the banking system (through the introduction of greater depositor discipline and the increased possibility of bank runs).

Other recommendations in Chapter 7 would increase the FDIC's ability to maintain adequate funding against potential problems. First, since evidence concerning the disposition of failed-bank assets suggests that it is more cost-effective to keep assets in the private sector rather than in a government liquidation, the current policy of passing as many failed-bank assets as possible to the acquiring bank should be maintained. Second, in order to eliminate the problems associated with affiliated banks operating as a single entity in good times, but as separate corporate entities in bad times, all federally insured banks should be required to protect the FDIC against losses in any banks owned by a common parent.

Issues Related to Handling Large-Bank Failures and Funding
the Deposit Insurance System

The open-bank assistance provided to Continental Illinois National Bank and Trust Company in 1984 focused the "too-large-to-fail" discussion on banking and the way the FDIC approaches failing- and failed-bank situations. The FDIC always has handled the failure of larger banks in a way that results in full protection of depositors and other general creditors of the bank; on the other hand, uninsured creditors in smaller banks on occasion have been subjected to loss.

Since 1951, the FDIC has followed a set of rules that has forced identification of situations that are handled outside of normal criteria. Specifically, the FDIC must determine whether an institution is "essential" to the community in order to justify any transaction that is more costly than a deposit payoff and liquidation. This system has had two effects. First, the

form of this "cost test" is biased towards preserving franchise values where they exist; the result has been a greater likelihood of handling larger banks in a manner that protects all general creditors. Second, the FDIC is forced to explicitly justify any action that cannot be rationalized under the cost test. Thus, the term "too-large-to-fail" is inappropriate in the context of banking; a more appropriate term is "too-important-to-pay-off."

Moreover, the ability to deviate from decisions based solely on the cost test has had a long history and, more importantly, is likely to continue to be a fact of life--i.e., the "too-important-to-pay-off" doctrine in all probability is here to stay. There will continue to be certain situations when an individual bank will be perceived to be too important to macroeconomic considerations or international stability to be handled in a way that would inflict losses on bank creditors. This becomes increasingly true as other countries provide de jure or de facto 100 percent coverage to their banks, and as banking and finance become more international in scope. Thus, it would be counterproductive to design a system that does not accommodate this reality.

To the extent that the handling of bank failures involves broader macroeconomic considerations, some have questioned the appropriateness of vesting this responsibility with the deposit insurer. In Chapter 8, it is asserted that in the U.S. the insurance agency is appropriate for this purpose. First, the responsibility has been with the FDIC since 1934, and the system has worked reasonably well. Second, the way other countries allocate this responsibility--often to the central bank or ministry of finance--is not necessarily appropriate for the U.S. since relationships between government and banking are often much different in those countries. Third, the nature of

banking makes it important to act rapidly in a failure situation; this would be inconsistent with exposing failure resolution to short-term political influence. Finally, failure resolution creates an interest in maintaining certain asset values; this interest normally will not be consistent with the conduct of appropriate monetary policy.

Resolving the FSLIC Problem

The difficulties experienced by the FSLIC and S&Ls during the 1980s have been the major impetus behind calls for insurance reform. Chapter 9 assesses the extent of the problem and outlines options for dealing with the FSLIC crisis.

The FSLIC shortfall is well in excess of the resources available to the FSLIC. Because these losses continue to grow, insolvent S&Ls should be closed as quickly as possible and reforms should be instituted to minimize the chance of recurring problems.

The S&L industry should bear as much of the cost as possible. However, severe constraints exist on the ability of the S&L industry to finance the FSLIC shortfall--the tangible net worth of all solvent S&Ls is only \$40 billion, or four percent of their assets. There is a substantial risk that extensive use of S&L industry resources could drive presently healthy S&Ls into insolvency or marginal solvency, and result in insurance-avoidance tactics, pressure to change insurers and increased risk-taking.

The banking industry also does not have the means to pay for the problem. Moreover, from an equity viewpoint, there is no reason why banks should pay for the S&Ls' problems. FDIC resources also should not be used due to the risk of leaving the Agency with insufficient funds to fulfill its function.

The federal government must pick up most of the tab for the S&L problem. Concerns about the federal budget deficit could be mitigated by an off-budget financing arrangement, whereby the Treasury pays the interest and guarantees the principal of borrowings by a limited-life, quasi-governmental agency. Off-budget financing has the advantage that it could avoid the politicalization of deposit insurance, which would seem inevitable if the costs were financed totally by current appropriations.

Ensuring that current problems do not recur is at least as important as finding a short-term financial solution. The fundamental objective of a "regulatory solution" should be strong government regulation of the S&L industry instead of the de facto self-regulation which was a major cause of current problems. Under any scenario in which the FHLBB or the FSLIC remain intact, the FSLIC should be independent of the FHLBB; the FHLBs should provide liquidity for housing, not supervise or examine the S&L industry; and the number of politically appointive positions in the FHLBB ought to be sharply reduced. In addition, in any scenario, banks and thrifts should be regulated according to common standards.

In terms of balancing the objectives of rapid resolution of insolvencies and minimizing the chance that current problems will recur, a

recapitalization of the FSLIC with reforms to the FHLBB and the FSLIC, an administrative merger of the FSLIC into the FDIC, or the creation of a new deposit insurance agency combined with more comprehensive reform of the thrift industry regulatory system are the most desirable options. Other options considered and deemed less desirable in terms of balancing these objectives include a recapitalization of the FSLIC without reforms; an immediate full-scale merger of the FSLIC and the FDIC; a conversion of healthy S&Ls to the FDIC insurance, with the FSLIC or some other agency resolving the remaining cases; and a complete restructuring of the financial institutions' regulatory system.

The three possible options that satisfy the requirements set forth in Chapter 9 can be called: (A) A stand-alone FSLIC; (B) An administrative merger of the FSLIC into the FDIC; and (C) Comprehensive reform of the thrift insurance and regulatory structure. The FDIC favors option A.

A stand-alone FSLIC envisions the creation of a separate FSLIC that is independent of the FHLBB. The FHLBB would continue to charter and supervise federal thrift institutions and would run both the FHLB System and Freddie Mac. The newly-separated FSLIC would directly supervise all state-chartered thrifts and be responsible for all liquidation activities related to FSLIC-insured institutions. The FSLIC would not be subject to the appropriations process. The district FHLBs would no longer examine or supervise thrifts. Their role would be confined to providing liquidity for institutions meeting housing-related criteria. System membership would be available to any depository institution meeting these criteria.

The second option is an administrative merger of the FSLIC into the FDIC. There would be common management and an administrative Board over separate FDIC and FSLIC funds. The new FDIC would supervise state-chartered thrifts and state-chartered banks that were not members of the Federal Reserve System and would perform all liquidation activities for insured banks and thrifts.

The third option calls for comprehensive reform of the thrift deposit insurance and regulatory structure. An administrative merger of the FSLIC and the FDIC would occur, creating a new federal deposit insurance corporation for banks and thrift institutions. The OCC would assume responsibility for chartering and supervising federal thrifts and the Federal Reserve Board would supervise thrift holding companies. The FHLBB would continue to oversee the FHLB System and Freddie Mac, under the umbrella of the Department of Housing and Urban Development or the Federal Reserve Board.

Conclusions

In addition to the conclusions outlined thus far, Chapter 10 outlines several other broader conclusions and recommendations. One of these conclusions is that the provision of deposit insurance should not interfere with the industry's adaptation to technological changes affecting financial markets, regardless of whether these changes imply an expanded or more limited role for traditional banking activities. This is consistent with the recommendations of the FDIC's Mandate for Change study, which was published in 1987.

In Mandate for Change, it was argued that firewalls could be established between bank and nonbank affiliates to prevent the use of insured deposits for nonbanking activities, thus eliminating a potential advantage that banking organizations might have over nonbanking organizations. At the same time, the limitations imposed on the types of businesses that may own a bank place artificial restrictions on legitimate economies of scope and the flow of capital and other resources into and out of the banking industry. By eliminating these restrictions, it will be easier for the banking industry to adjust to the technological changes that are occurring, while ensuring that funding advantages are not given to nonbank entities.

The ability of the industry to adapt to technological and economic changes also would be enhanced by allowing for a more orderly entry into and exit from the industry. Restrictions on intrastate branching and interstate banking impede the orderly entry into and exit from the industry, and increase the FDIC's costs of resolving failures. In addition, these restrictions limit loan diversification, thereby increasing risks to the system. The elimination of these geographic restrictions would allow the industry to be more responsive to changing financial conditions and less susceptible to regional economic difficulties.

Throughout this Study, questions concerning the trade-off between financial stability and market discipline are raised. Reform proposals that call for greater market discipline have the potential to reduce the risk-taking incentives that deposit insurance provides, but they also have the potential to create costs by increasing the chances of bank runs.

Underlying reform proposals that call for more market discipline, by strictly enforcing de jure coverage or rolling back the insurance coverage, is the view that markets (deposit markets) are relatively efficient at evaluating bank risk and that the costs of the increased chances of bank runs are relatively low. Thus, in this view, the benefits of increased depositor discipline outweigh the costs.

In this Study, the view is that existing forms of market discipline in well-capitalized banks, when combined with prudent supervision, are sufficient to control incentives for excessive risk-taking by banks caused by the existence of deposit insurance. At the same time, it is the FDIC's view that bank runs or the threat of bank runs can be costly, and that any moves toward enhancing market discipline must seriously weigh these potential costs. Consequently, the Study stresses the need to enhance existing forms of market discipline; to strengthen supervision so that overly risky behavior is detected and controlled in a timely manner; to maintain strict capital standards and ensure that insolvent institutions are promptly closed; and to provide insuring agencies with the proper incentives so as to facilitate the long-term viability of the federal deposit insurance system.

Chapter 1

INTRODUCTION

During the past year, the state of our Nation's deposit insurance system and the ways it could be improved have been the special subjects of discussion and study at the Federal Deposit Insurance Corporation (FDIC). The results of our efforts are included in this report, Deposit Insurance for the Nineties: Meeting the Challenge. Our Study addresses two fundamental issues. First, we examine the problems associated with maintaining a healthy deposit insurance system. Our recommendations for new methods of protecting the deposit insurance system against future problems comprise the bulk of this report. Second, we focus on the immediate problems facing the Federal Savings and Loan Insurance Corporation (FSLIC) and the thrift industry.

Deposit insurance serves two basic purposes. It provides a "safe haven" for the funds of individual depositors and brings stability to the banking system. The federal deposit insurance system has achieved these goals since its inception. Experiences during the past decade, however, have given rise to concerns about the continuing viability of the system. At issue is the current system's ability to sufficiently control excessive risk-taking by insured financial institutions. While deposit insurance protects individual depositors and provides stability to the banking system, it also indirectly can promote increased risk-taking by insured institutions. The question that must be asked is whether the existing deposit insurance system is adequately structured to continue to serve the purposes for which it was designed.

Concerns about the continuing viability of the deposit insurance system stem from the economic, technological and regulatory changes that have affected our economy's financial markets over the past decade. Economic conditions have varied considerably and often were inhospitable to financial institutions. Over the last decade, the economy experienced an extended period of inflation that was accompanied by high and volatile interest rates, followed by a period of disinflation. Regional and sectoral economic problems, such as those found in the Southwest and in agriculture, adversely impacted financial institutions over the decade, and continue to be a problem today. At the same time, technological changes were revolutionizing the entire field of finance, including the practice of banking. The distinctions between insured and uninsured institutions became less apparent as banks faced increased competition from nonbank sources. Today, the "technological revolution" continues to blur the regulatory distinctions between classes of financial institutions.

During the last decade, Congress enacted two major pieces of financial deregulation legislation: the Depository Institutions Deregulation and Monetary Control Act of 1980 and the Garn-St Germain Act of 1982. Both pieces of legislation represent Congress' response to the economic conditions and technological changes that adversely impacted financial markets. Specifically, high and volatile interest rates and an extended period of persistent inflation rendered interest-rate ceilings untenable and contributed to large losses in the S&L industry. As a result, interest rates were deregulated and restrictions on permissible activities for S&Ls were relaxed, while the deposit insurance system remained unchanged.

The significant problems confronting the banking and thrift industries are of primary concern to the health of the deposit insurance system. The banking industry has had to contend with record numbers of bank failures in recent years. While the FDIC successfully has responded to these challenges, the solutions have not been costless. This year the FDIC will experience a loss for the first time in its history. For its part, the thrift industry faces major problems, including the insolvency of the FSLIC. Estimates of restoring the FSLIC to solvency currently range from \$50 billion to over \$100 billion. The problems plaguing both industries clearly underscore the need to reevaluate and strengthen the deposit insurance system.

Our concerns regarding the adequacy of the deposit insurance system are not new. Indeed, over the past decade, the banking and thrift industries, their regulators, and the Congress have been engaged in a dialogue on the state of the deposit insurance system. Deposit insurance reform was examined at length following the financial deregulation of the early 1980s. As directed by the Garn-St Germain Act of 1982, studies were submitted to Congress by each of the federal deposit insurance agencies in April 1983.¹ These studies evaluated the existing deposit insurance system in light of the recent legislative changes, and recommended changes which would be appropriate given the newly relaxed regulatory environment. The discussion of deposit insurance reform was enhanced further by the contributions of others, including studies conducted by the General Accounting Office and the Working Group of the Cabinet Council on Economic Affairs.²

In general, these studies found that regulators' ability to control excessive risk-taking had been hampered by the changing economic and

regulatory environment. They suggested that alternative methods for monitoring and controlling risk were needed. While the studies differed in terms of approach and specific recommendations, a consensus emerged that there should be greater reliance on market-oriented solutions. In the newly deregulated financial environment, market mechanisms were to supplement the existing system of supervision and regulation.³ The emphasis placed by these studies on market-oriented solutions was consistent with the trend toward decreased regulation of financial markets.

Today, deposit insurance reform continues to receive attention. Proposals to modify the deposit insurance system range from a major scaling back of insurance guarantees and increased emphasis on depositor discipline, to increased emphasis on capital requirements, supervision and timely closure of insolvent institutions. Those who call for a major scaling back of deposit insurance guarantees doubt that the regulators alone can adequately control risk in today's financial environment. Those who propose less sweeping changes place greater trust in existing market discipline and in the ability of regulators to adequately control risk-taking through supervision.

From the FDIC's vantage point, the system is basically stable. Therefore, we believe the appropriate prescription for current problems is one of modest revision rather than massive reforms. The goal should be to improve the current deposit insurance system so that the problems of the past will not recur and the challenges of the future will be met. Thus, our Study takes a close look at the deposit insurance system with the following question in mind: How can the deposit insurance system best meet the challenges ahead?

In Chapter 2, a framework for analyzing insurance reform issues is presented which provides much of the groundwork for what follows in the Study. The chapter reviews the rationale for deposit insurance and the related question of what makes banks special, the distortions created by deposit insurance, and possible trade-offs involved in choosing different policy options. It is argued that different views concerning the nature of these trade-offs are a major factor in how we approach deposit insurance reform issues.

In succeeding chapters, several areas of potential reform are analyzed. In Chapter 3, "Deposit Insurance Pricing," the desirability and feasibility of implementing a system of risk-based insurance premiums are addressed. The pricing problem is discussed and various proposals for risk-related pricing schemes are assessed. Chapter 4, "Market Mechanisms for Controlling Risk," analyzes a wide variety of proposals that would alter the degree of market discipline in the system. In theory as well as in practice, determining the optimal role for market discipline is a complex issue; while increased market discipline can reduce excessive risk-taking by insured institutions, it also can affect the stability of the entire system. The result is a trade-off between the benefits and the costs associated with market discipline. Finding the optimal degree of discipline, which balances these costs and benefits, is a difficult task.

Because market discipline alone cannot be relied on to adequately control risk-taking, supervision plays a critical role. Indeed, the deposit insurance system was created to help control the instability stemming from the excessive market discipline of the early 1930s. At issue is how these two

different, but complementary, ways of controlling risk-taking can be best implemented. In Chapter 5, "Supervision," the supervisory system is analyzed. The effectiveness of the examination program, enforcement actions, and the applications process are reviewed and recommendations for improvements in these areas are made.

At times, the ability of the insurer to choose discretion over a strict enforcement of rules becomes important. Chapter 6, "Forbearance," addresses the policy of supervisory forbearance and examines questions regarding the timing and terms of granting forbearance. It is an essential part of the supervisory process to work with troubled banks and to retain flexibility with respect to supervisory sanctions and closure policies. If reasonable parameters and limits are set, discretionary forbearance can, and should, continue to be a cost-saving and effective tool for managing risk-taking by insured depository institutions.

Despite the operation of market discipline and appropriate supervision, banks sometimes fail. How these failures are handled can have important implications for the long-term health and stability of the deposit insurer and the banking system as a whole. Chapter 7, "Failure Resolution," examines the issues related to alternative techniques for handling bank failures. The FDIC's policy objectives and the methods it has available to meet those objectives are presented and analyzed.

A related issue facing the insurer stems from uncertainty regarding how the insolvency of one of the largest banks would be handled. The perception that regulators would be unwilling to allow larger banks to fail in the

conventional sense (where uninsured creditors are exposed to loss), has fostered the notion that some banks are "too-large-to-fail." It is argued that this perception, in turn, gives these largest banks a funding advantage over smaller competitors and weakens the incentive for uninsured creditors to monitor bank management. A discussion of these and other "Issues Related to the Handling of Large-Bank Failures and Funding the Deposit Insurance System" is found in Chapter 8.

Finally, the problems associated with the S&L industry and the FSLIC insolvency are addressed in Chapter 9, "Options for Solving the FSLIC Problem." Current estimates for restoring the FSLIC to solvency range from \$50 billion to over \$100 billion. The magnitude of this problem, in terms of its absolute size and its rate of growth, underscores the need to address these issues now rather than later. In addition to the need to address the problem quickly, options for financing and regulatory restructuring are discussed.

The Study's conclusions are summarized in Chapter 10.

FOOTNOTES

¹The three studies were the FDIC's Deposit Insurance in a Changing Environment, the Federal Home Loan Bank Board's (FHLBB) Agenda for Reform and the National Credit Union Administration's Credit Union Share Insurance: A Report to Congress.

²These two studies were the U.S. General Accounting Office's Staff Study of September 1986, titled Deposit Insurance: Analysis of Reform Proposals (which evaluated the insurance agencies' earlier studies), and the Working Group of the Cabinet Council on Economic Affairs' Recommendations for Change in the Federal Deposit Insurance System (January 1985).

³The following alternatives were among those considered by the insurance agencies' studies. First, both the FDIC and the FHLBB studies found the concept of risk-based premiums theoretically appealing. While an "ideal system" was not judged to be feasible, the development and eventual implementation of risk-based premiums was advocated.

Second, the FDIC study stressed the importance of restoring the perception that uninsured depositors are at risk. It was suggested that a greater degree of market discipline could be introduced and the importance of improved disclosure also was stressed. On the other hand, the FHLBB study determined that increased "depositor discipline" was unnecessary.

Next, while the FHLBB study argued for some private participation in the insurance of deposits, the FDIC study concluded that any comprehensive program of privately provided excess deposit insurance should be left to the dictates of market forces.

Finally, although not a "new" alternative for controlling risk-taking, the enforcement of capital standards was argued to be one way to shore up the system without legislative changes. In addition, the FDIC advocated the strengthening of capital standards through the use of subordinated debt. It would add market discipline to the system as debt holders must monitor the institution.

Chapter 2

FRAMEWORK FOR ANALYZING DEPOSIT INSURANCE REFORM

This chapter first examines the reasons why the government provides deposit insurance and how the provision of deposit insurance can improve economic performance. It is argued that the primary reason for deposit insurance is to promote financial stability by preventing bank runs. Deposit insurance, however, may allow excessive risk-taking and there exists a trade-off between the benefits of financial stability and the costs of the possible misallocation of resources associated with excessive risk-taking. The terms of this trade-off depend on the availability of alternatives to bank deposits as sources of liquidity, the importance of bank lending activities and the difficulty associated with monitoring bank asset values and risk-taking. Finally, alternatives to deposit insurance and reforms of deposit insurance are considered.

The Rationale for Deposit Insurance

Deposit insurance is a form of government intervention into the marketplace. Government provision of deposit insurance is predicated on the

existence of social benefits associated with the insurance of bank deposits. The two most important social benefits are providing a safe haven for small savers and preventing widespread bank runs and the damage that they cause.¹

Providing a Haven for the Financially Unsophisticated

Government action often is triggered by the desire to help a particular group that is perceived to be disadvantaged in some way. In the case of deposit insurance, the argument is that there are people who are relatively unsophisticated financially who should have easy access to a safe means for both making payments and for storing wealth.² If this were the sole reason for government intervention, it would seem that the current system represents a sledgehammer approach, and that either lower deposit insurance coverage or a more limited alternative form of protection would be appropriate.

Preventing Bank Runs

The primary purpose of deposit insurance is to promote financial stability by preventing destructive bank deposit runs. Deposit runs are a form of market failure caused by bank investment in illiquid loans financed by more liquid deposit liabilities. Deposit insurance is designed to reduce the possibility of runs and to thereby avoid the damage that runs cause.

What is meant by destructive bank runs? Bank runs are caused by a combination of two factors. First, loans, the primary bank asset, are illiquid in that they can not be sold quickly without a loss in value. The second factor that causes bank runs is the ability of most depositors to withdraw their deposits either on demand or on short notice. This means that bank deposit liabilities are quite liquid. These two factors virtually guarantee that a bank will be unable at any time to fulfill its potential obligation to convert all or most of its liabilities to cash. Of course, under normal circumstances a bank will not be called upon to fulfill all of its obligations; this is what allows a bank to invest in illiquid assets.

If, however, a depositor believes that a bank will be called upon to fulfill more than the normal amount of withdrawals, that depositor will have the incentive to attempt to withdraw his or her funds. This is because once a bank has depleted its inventory of liquid assets, it must begin to sell illiquid assets to meet further withdrawal demands. By definition, each such sale means a bank is realizing a liquidation loss on the asset. At some point a bank will have suffered enough losses to render it unable to fulfill its obligation to the remaining depositors.

The reader should note that it is the "first come, first served" nature of the process that provides depositors with the incentive to run. Those depositors at the beginning of the withdrawal line lose nothing, while those at the end lose everything. A depositor who merely suspects that other depositors are going to run will get in line whether he or she desires liquidity at that time or not. This leads to "panic" runs. Since the failure of one bank may affect how depositors view other banks, bank runs may be

contagious. It is this contagion effect of bank runs that deposit insurance was designed to alleviate.

The Costs of Deposit Runs

The social costs of bank failures and the appropriate form of government intervention depend on the role banks play in the economy. This section examines the role of banks in, and the threats posed by runs to, the money supply process, the payments system, and the process of financial intermediation. Deposit insurance is intended to reduce the likelihood of deposit runs and the social costs that accompany runs or the threat of runs. General sources of social costs are externalities and deadweight losses. Contagious bank runs can involve externalities by disrupting the money supply process, the payments system, or financial intermediation. Individual bank runs can cause systemic problems via the payments system, thus imposing third-party costs. Deadweight losses result if bank runs force the fire-sale liquidation of assets, or if less investment takes place because of the threat of such liquidation.

Contractionary Effect on the Money Supply

This argument for deposit insurance focuses on the banking industry's role in the money supply process. The system of fractional reserve banking enables banks to lever the stock of high-powered money (cash and reserves at the Federal Reserve) into a stock of money several times larger. This enables

the banking industry to be the major conduit through which the Federal Reserve can control the money supply.³ Bank runs, especially if they are widespread, have the potential to sharply curtail the money supply. If depositors who withdraw their funds hold currency rather than redeposit their funds in other banks, then, barring any offsetting government action,⁴ bank reserves will be reduced and the banking system's ability to create money will be diminished. If runs to currency are widespread, the resulting reduction in the money supply may lead to deflation and recession.⁵

In the absence of a mechanism to prevent or stop bank runs, financial crises in the form of systemic or contagious bank runs can cause economic disruptions. However, in terms of protecting the money supply, isolated runs or runs that involve a flight of funds from some banks in the system to other banks in the system should not be a concern, since little or no money would be destroyed.

Disruption of the Payments System

While nonsystemic bank runs do not threaten the money supply, they do pose a threat to the payments system. Deposit insurance may be justified to prevent individual bank runs in order to provide a safe payments system.

Economic activity is enhanced when fewer real resources are devoted to making payments. As an economy develops, the essential medium in making payments evolves from commodity to paper to electronics. Banks have been an

integral part of this development, as evidenced by their role in checking services, credit cards, and electronic transfers of funds.

There is a public-good aspect to the development of a method of making payments. As Edwards and Scott note:

One person's decision to use (and accept) checks in payment for goods confers benefit on many others (as well as himself) because it makes it easier for them to use and accept checks (just as the value of a telephone depends upon how many people have a telephone).⁶

The same argument applies to the use of credit cards and electronic transfers. As with other public goods, the fact that at the margin the private value is less than the social value leads one to expect that an unfettered market will produce too little of the good in question. This introduces a beneficial role for government to play in "pushing" the market to the socially optimal use or production of the good.

In the case of payments system mechanisms such as transactions accounts and wire transfers, that role typically has taken two forms: providing resources to facilitate the mechanism, e.g., clearinghouse services; and eliminating risk to participants. Bank runs pose a risk to the payments system because a bank facing a run may be unable to meet its obligations to the other participants in the system. Such disruptions will interfere with the smooth workings of the system, and corrective measures may add friction to the movement of funds. To the extent that this threat can be removed by deposit insurance, it can contribute to the fluidity of the payments system and encourage the production of that public good.

Interference with the Financial Intermediation Performed by Banks

In addition to posing a threat to the money supply and the payments system, bank runs can impose social costs by interfering with the credit allocation role of banks. Bank runs are costly, it is argued, in part because runs can disrupt or destroy an important conduit of investment funds in the economy. This argument for deposit insurance therefore focuses on the role of banks as intermediaries in the economy. This section first discusses the general role of financial intermediaries, and then describes banks as a special class of intermediaries, distinguished primarily by their funding of illiquid assets with liquid liabilities. It is argued that this feature is critical to both the productive role of banks and their susceptibility to damaging bank runs.

Financial intermediaries. Investment is necessary in order for an economy to grow, and savings are necessary to provide the resources for that investment. Because the people who want to save are not necessarily the people who have investment projects, the need for borrowing and lending arises. A saver is willing to lend under certain terms, and in fact prefers certain lending arrangements to others. Likewise, investors will prefer some borrowing contracts to others. Direct financing occurs to the extent that borrowers and lenders who prefer the same arrangements can find one another without incurring significant search costs. If they cannot find one another, or if there are lenders who prefer arrangements that borrowers are unwilling to accept (or vice versa), then there is a role for financial intermediaries. These institutions provide a real service to the economy: investment and output will be greater, and this should translate into enhanced social welfare.

The opportunity to improve borrowing and lending arrangements causes financial intermediaries such as commercial banks, thrift institutions, insurance companies, pension funds, finance companies, and mutual funds, to arise. These firms lower search and information costs for savers and investors, make more long-term funds available for investors, and provide lenders with a wide range of financial instruments. By issuing claims against themselves, financial intermediaries provide savers with easy access to desirable assets. Similarly, by pooling the funds of a large number of savers, financial intermediaries provide a prominent location where investors can come to borrow. As a result, both borrowers and lenders incur fewer search costs. By performing these functions, financial intermediaries are able to "offer a higher return net of transactions costs to lenders, and they are able to provide funds at a lower cost net of transaction costs to borrowers."⁷

By reducing search and information costs, financial intermediaries act as brokers. In addition to this brokerage function, financial intermediaries perform a portfolio transformation function by modifying the attributes of the financial securities that pass between the borrowers and lenders.⁸ Two important attributes that are altered by this process are the risk and maturity of the instruments.

Savers would like to hold portfolios which include a broad range of investments in order to avoid wide swings in wealth. To achieve this directly, savers would need to find many borrowers and lend small amounts to each. An intermediary can pool the savings of a large number of lenders and

provide the funds to many borrowers. This allows lenders to achieve a more certain return than they could otherwise obtain through direct financing.

With direct financing, the maturity of the instrument is the same for the borrower and the lender. Because people face uncertainty as to when they will desire funds with which to conduct transactions, they may be unwilling to commit funds over long periods, and, as a result, less investment will be funded. Intermediaries can issue debt that is short-term or that is easily callable in order to provide lenders with some protection against this uncertainty. Intermediation thus reduces the need for maturity matching and allows long-term investment to be funded with short-term lending.

The unique intermediary role of banks: what is the sound of one hand clapping? Depository institutions currently perform the bulk of the financial intermediation in the U.S. economy. This section will examine the role of these institutions and the characteristics that distinguish them from other financial intermediaries. For purposes of this discussion, "bank" will refer to a stylized entity which: issues liabilities that are redeemable at par either on demand or after some short maturity; and holds assets that are illiquid because banks have private information about the quality of the assets. The first part of the discussion will focus on the characteristics of bank assets. The second part of the discussion focuses on an important and controversial question: namely, whether there is essential interaction between the liability and asset sides of the bank, or conversely, whether it is innocuous, in theory and in practice, to separate the two sides of the balance sheet.

Broadly speaking, loans are the asset class that distinguishes banks because the transactions that produce bank loans require not only that borrowers and lenders find one another, but also that lenders must evaluate and monitor potential borrowers. Lenders face two problems because they have imperfect information. First, they face the (ex ante) adverse selection problem of assessing the quality of potential borrowers. Second, lenders face the (ex post) moral hazard problem of monitoring and controlling the behavior of borrowers. By gaining expertise in evaluating and monitoring, and by accumulating a body of private information, financial intermediaries are able to reduce information costs.

Stated differently, banks specialize in lending to a unique class of borrowers. For these borrowers, "public information on the economic condition and prospects of such borrowers is so limited and expensive that the alternative of issuing marketable securities is either nonexistent or unattractive."⁹ Because these borrowers cannot easily convey information about their own creditworthiness to lenders (or conversely, because lenders cannot easily ascertain the creditworthiness), there are agency costs associated with the borrowing and lending arrangements available to them. Banks alleviate these costs by specializing in evaluating and monitoring this class of borrowers.¹⁰ In essence, banks' information-gathering and monitoring expertise of this class of borrowers allows them to find profitable investment opportunities in essentially nonmarketable assets.

Once the loans have been made, the agency problem now extends to any potential sale of the assets by the bank. This results in illiquidity because the value of the project is known only to the monitor (the bank); a

prospective buyer must incur costs to evaluate the project and these costs will result in a lower value. The important implication is that there are liquidation costs associated with these assets. Social welfare is enhanced if these loans are allowed to mature.

An important question is whether there is some economic function that is served by having the liabilities and assets that characterize banks combined in one entity. Is it possible to separate the two sides of the balance sheet without causing a reduction in useful economic activity? For example, one could picture a system that required liquid liabilities to be funded by liquid assets only, while illiquid assets were funded by long-term debt or equity only. The following discussion argues that such a system likely would be unable to provide the same level of economic welfare than a system that lacked that requirement.

This view holds that the special role of banks derives from the social-welfare enhancement that can be realized when banks coordinate the funding of these illiquid assets with highly liquid liabilities. Banks issue deposits that satisfy depositors' liquidity needs. By pooling liquidity risk across individuals, the bank will need to hold fewer liquid assets than the depositors would hold if they lacked access to the bank. To the extent that the bank can meet the liquidity needs with fewer liquid (and less productive) assets, there are more funds available to support productive illiquid investment.¹¹

By combining the holding of illiquid assets with the issuing of liquid liabilities, banks provide real economic services that otherwise could not be obtained.

The main functions of banks can be described in terms of the balance sheet items described above. Asset services are provided to the "issuers" of bank assets (the borrowers); these services include evaluating, granting and monitoring loans. Liability services are provided to the "holders" of bank liabilities (the depositors); these services include holding deposits, clearing transactions, maintaining an inventory of currency, and service flows arising from conventions that certain liabilities are acceptable as payments for goods. Transformation services require no explicit service provision to borrowers or depositors but instead involve providing the depositors with a pattern of returns that is different from (and preferable to) what depositors could obtain by holding the market. Explicitly, this means the conversion of illiquid loans into liquid deposits, or more generally the creation of liquidity.¹²

As stated earlier, the fact that illiquid bank assets are funded with more liquid liabilities redeemable at par means that banks are susceptible to runs. The belief that a panic run will occur is self-fulfilling. In the face of the threat of runs, depositors would require banks to hold more liquid assets in order to protect them against losses in a panic run. The greater the likelihood of a panic run, the less investment will be undertaken by the special class of borrowers to which banks cater. Ex ante, the threat of runs reduces productive investment.

When runs occur, they may force "fire-sale" liquidations of bank assets that impose social costs. Again, these costs arise because most banks assets (loans) are inherently difficult to value and, hence, are ill-suited for trading in spot markets. Bankers possess specialized information about the nature of their assets that cannot be quickly or easily transferred. This makes spot trading prohibitively costly for the establishment of a broad secondary market, with the result that forced liquidations typically yield asset prices that are below "equilibrium values."¹³ In the process,

creditworthy borrowers lose financing (often for extended periods, given the information costs noted), production is interrupted, and consumption plans are frustrated. Runs can be socially costly because they force a market valuation of assets that are not ordinarily valued in markets. The assets are not traded voluntarily precisely because their characteristics make markets inefficient devices for valuing them. The results are understandably costly when the banking organization is recognized as (in part) a device for avoiding the excessive costs of market organization (for trading such assets) in the first place.¹⁴

If there were some mechanism to ensure that all liquidation losses would be shared equally by all depositors, then there would be no incentive to participate in panic runs. This is because, from any given depositor's point of view, the action of other depositors has no impact on his or her eventual wealth. In an ideal world, because this mechanism would eliminate panic runs, there never would be liquidation losses to be shared and the mechanism never would need to be used.

To summarize, this view holds that bank runs are costly not only because they may result in the destruction of money or disruption of the payments system, but because runs adversely affect the financial intermediation performed by banks. Economic activity is adversely affected when loans are liquidated prematurely in order to meet depositors' claims. More importantly, if bank runs are widespread there may be a general contraction of these special intermediary services.¹⁵ Borrowers who may otherwise receive bank loans in a more favorable environment may not be funded, as banks are forced to maintain high levels of liquid assets.

Bernanke (1983) has provided some evidence that, in addition to the adverse consequences of a declining money supply, the banking system's reduced effectiveness in performing its unique intermediary function helped to convert the severe downturn of 1929-30 into a protracted depression. Bernanke (1983) argues that the fear of runs during 1930-33 caused banks to increase their precautionary reserves and generally increased their desire to hold liquid assets. According to Bernanke,

these factors, plus the actual failures, forced a contraction of the banking system's role in the intermediation of credit. Some of the slack was taken up by the growing importance of alternative channels of credit.... However, the rapid switch away from the banks (given the banks' accumulated expertise, information, and customer relationships) no doubt impaired financial efficiency and raised the cost of credit intermediation.¹⁶

Deposit insurance works by directly guaranteeing depositors that they will not suffer losses, thus removing the incentive to participate in a bank run. In order for deposit insurance to be effective, the guarantee must be credible. This requires that the insurer have access to a source of funds commensurate with the potential liabilities assumed. The current federal deposit insurance system relies on a fund built over time from the annual insurance premiums charged to banks.¹⁷ The system originally was structured to maintain the fund at a percentage of insured deposits, with premiums being charged only when the fund was deficient. A further discussion of the issue of funding deposit insurance appears later in the Study.

Distortions Created by Deposit Insurance

Whatever the motivation for its existence, deposit insurance affects the allocation of resources in an economy. The previous sections described possible beneficial effects: protection of unsophisticated depositors, protection of the money supply, and protection of the financial intermediary function. As with any government intervention designed to enhance the market mechanism, there are potentially adverse effects from the implementation of deposit insurance. This section will describe the nature of the problem and will discuss the factors that determine the severity of that problem.

Deposit Insurance Removes Depositor Discipline

By providing a guarantee that deposits are not subject to loss, deposit insurance has two principal effects: it removes the incentive to participate in a bank run and it eliminates the need for depositors to police bank risk-taking. This latter effect introduces the potential for substantial costs to arise from the provision of deposit insurance. Deposit insurance therefore involves a basic trade-off between depositor discipline and the possibility of destructive bank runs.

In any financial transaction the borrower must compensate the lender for risk that is borne by the lender. A borrower whose repayment is more uncertain must provide a higher expected return to the lender. In the case of banking, the repayment depends on the return on the portfolio held by the bank and by the level of bank capital that serves as a cushion to absorb losses.

In the absence of deposit insurance, a bank that wished to hold a riskier portfolio of assets or a smaller amount of capital would have to offer a higher expected return to depositors.¹⁸

In the presence of deposit insurance, depositors would be indifferent to the riskiness of the repayment. The rate on deposits would not be sensitive to asset choice or capital levels. This lack of depositor discipline may provide an unfettered bank with the opportunity to arrange its portfolio so as to increase its expected profits at the expense of the insurer. This possibility is at the heart of the concern over the current state of deposit insurance.

Incentives for Excessive Risk-Taking

With deposit insurance the FDIC bears the risk of any loss. The FDIC's position is therefore similar to that of an uninsured depositor's in that the FDIC bears the risk of loss arising from a bank's investment decisions. However, unlike other creditors, the FDIC can not vary the premium it charges for insurance on the basis of risk.¹⁹ This flat-rate insurance pricing structure, it is argued, creates an incentive for excessive risk-taking. The following simple example presents the argument more directly.²⁰ Suppose a bank is funded with \$90 of deposits. The bank has a choice between two asset portfolios. The "safe" portfolio will return \$100 with certainty. The "risky" portfolio will pay \$80 half the time ("bust") and will pay \$120 the other half ("boom"). Notice both portfolios have the same expected value. The value of the bank if it chooses the safe portfolio is \$10²¹. The value

of the bank to the shareholders if it chooses the risky portfolio is 1) zero if the portfolio busts, or 2) equal to $\$30^{22}$ if the portfolio is successful. The expected value of the bank if it chooses the risky portfolio is $\$15^{23}$. Therefore, if the banker wants to maximize the expected return to shareholders, he or she should select the risky portfolio.

Obviously, what drives the example is that the insurer bears the cost when the portfolio busts. Consider the cost of providing the insurance. If the bank chooses the safe portfolio, there is no cost because the bank cannot fail. If the bank chooses the risky portfolio, the cost is 1) $\$10$ if the portfolio busts²⁴ and 2) zero if the portfolio booms; this gives an expected cost of $\$5^{25}$. By allowing the bank to freely choose the portfolio, the insurer has, directly at its own expense, increased the bank's expected value from $\$10$ to $\$15$.

Controlling Bank Risk-Taking: The Current System

In the context of the example presented above the insurer can do several things to protect itself. First, it can prevent the bank from choosing the risky portfolio (supervision and regulation); it can charge the bank $\$5$ if the bank chooses the risky portfolio (risk-based deposit insurance); or it can require the shareholders to replace $\$10$ of deposits with equity, which would eliminate the insurer's cost even in a bust (capital requirements).²⁶

The current system of deposit insurance relies primarily on three mechanisms to limit risk-taking. The first mechanism is bank supervision, examination and regulation. FDIC regulations have a purpose similar to the covenants that are found in virtually every debt contract: to prevent bank management from undertaking activities that increase risk to the detriment of existing creditors or the insurance fund.

The second mechanism used to limit risk-taking is bank capital requirements. Currently, banks are required to maintain a minimum of 5.5 percent primary capital relative to bank assets. Capital serves to reduce the incentives of owners to increase risk since the greater the amount of capital the larger is the owners' loss in the event of failure.

The third and final mechanism used to limit bank risk-taking is the discipline exerted by uninsured depositors and nondeposit creditors of the bank. Because uninsured claimants risk loss in the event of the bank's failure, they have an incentive to monitor the bank's investment activity and to adjust the return they require on their investment to the asset and financial risk of the bank.

In addition to regulation and the discipline uninsured depositors and creditors provide, whether banks have the incentive to undertake excessive risks will depend on several other factors. These factors include: risk aversion on the part of bank owners, the presence of significant bankruptcy costs, and the costs imposed on bank managers associated with a bank's failure.

If bank owners are risk averse, they may not be willing to accept higher risk for higher return. This is probably not relevant for large banks with widely held stock because the shareholders can diversify their portfolio. However, for smaller institutions where the owner may have a sizable portion of his or her wealth invested in the bank, risk aversion may be a reasonable assumption. As for larger banks, they are typically owned by holding companies which are funded with both equity and debt. Debt holders will have an incentive to police the riskiness of the holding company asset, i.e., the bank.

If there are significant bankruptcy costs associated with bank failures, then the bank may choose a safer portfolio in order to avoid them. A potential bankruptcy cost is the loss of the bank charter, assuming that a charter enables one to earn supranormal profits.²⁷

Finally, if bank managers control the bank's investment decisions, they may choose not to pursue excessively-risky strategies. This will occur if bank managers do not share fully in the successes of the bank; but, in the event of failure, bank managers do incur significant costs, i.e., loss of career opportunities. In this situation, managers will be reluctant to take excessive risks.

Alternatives to Deposit Insurance

Deposit insurance is not the only means available to safeguard the financial system from bank runs. How one evaluates these alternatives, as well as the reform proposals discussed in this and subsequent chapters,

depends on what role banks are assumed to play in the economy and the costs associated with bank failures.

Suspension of Convertibility

Throughout the nineteenth century and early twentieth century, suspension of convertibility was used to halt bank runs. Suspension of convertibility temporarily relieves banks of their obligation to satisfy withdrawal demands and, thus, prevents the costly liquidation of assets. Once the panic has subsided and action has been taken to prevent a recurrence, the bank returns to business as usual. A problem with this mechanism is that the incentive to run remains in order to avoid the temporary inaccessibility of funds.

Lender of Last Resort

Bank runs are costly to the extent that they cause a significant contraction of the money supply, disrupt the workings of the payments system, or disrupt the financial intermediation performed by banks. One possible solution to the problem is the presence of a lender of last resort.

In terms of protecting the money supply, an effective lender of last resort is capable of offsetting any contraction of the money supply caused by bank runs by the injection of reserves, either through the purchase of securities or by providing loans to banks. This requires the lender of last

resort to be able to measure the contractionary effect of the runs and to gauge the amount of reserves necessary to inflate the money supply to the appropriate level. Both of these require determining the extent to which the runs represent a flight to currency. Protection of the money supply does not have to involve protecting individual banks; it merely requires the replenishment of systemwide reserves.

While protecting the money supply does not require preventing individual bank runs, protecting both the payments system and financial intermediation does require attention to individual banks. The inability of a bank participating in the payments system to repay its obligations can have systemic effects. A run on an individual bank can force the costly liquidation of assets. The lender of last resort can prevent the disruption by stepping in to fulfill the obligation of the deficient bank. Essentially the lender of last resort must be willing to transfer the risk of insolvency from participating banks to itself.

At this point, let us define what we mean by lender of last resort and deposit insurer so as to make clear the distinction between them. A deposit insurer provides a guarantee on certain deposits that is noncontingent; a lender of last resort will fund the withdrawals from solvent institutions only.²⁸ When a runs occurs, the lender of last resort must make a judgment regarding the solvency of the bank experiencing the run.

If bank assets are difficult for outsiders to value, then depositors will have difficulty determining whether or not they should participate in the run. Presumably, they would err on the side of safety, and participate in the

run even if their best estimate was that the bank was solvent. Runs would occur on solvent institutions, and thus the lender of last resort would not be expected to be as effective in preventing this type of financial instability as would a deposit insurer.

Another drawback arises from the conflict between protecting the financial system and avoiding inflationary growth of the money supply. To be effective, the lender of last resort must provide a credible commitment to freely fund withdrawals from solvent banks. Providing this commitment requires relinquishing control over the creation of reserves, and thus, the money supply.²⁹

Narrow Banks

One way to prevent bank runs is to prohibit banks from funding illiquid assets with liquid liabilities. This is the heart of the "narrow-bank" proposals put forth by Litan (1987), Bryant (1988), and advocates of 100 percent reserve banking. These proposals substitute structural reform of the financial-services industry for deposit insurance reform. The goal of the narrow bank is twofold. First, to provide for a completely safe payments system; and second, to permit banking organizations to expand into other activities, such as securities underwriting, without extending the federal safety net and creating potential conflicts of interest.

One problem with these proposals is feasibility. Currently, the checkable account portion of the money supply is over \$550 billion. There are

\$381 billion in short-term Treasury bills outstanding. Given this shortfall, either commercial paper or long-term Treasury instruments would need to be included as eligible reserves. Once the range of eligible investments is broadened, the resulting risk poses a threat to a safe payments system, thereby defeating one of the major purposes for the narrow bank.³⁰

Putting aside the question of feasibility, the problem remains that enhancing the payments system is not the only potential role for banks in the economy. Banks facilitate intermediation between savers who desire liquidity and borrowers who lack direct access to credit markets. Also, there may be important synergy between the deposit-taking and lending functions of banks.³¹ If these are important aspects of the economic role that banks play, then the imposition of a narrow-bank financial structure will have one of two undesirable results.

The first occurs if firms are successful in circumventing the imposed structure. The narrow-bank structure severely restricts the type of assets that can be held by firms issuing "runnable" liabilities. If there are profits to be earned from circumventing this restriction, then firms will act accordingly. If they are successful, there will be a class of firms that is susceptible to runs and presumably poses a threat to financial stability.³²

The second case occurs if firms desire to, but are not successful in, circumventing the restrictions. The flow of savings to a desirable form of financial intermediation will have been diminished. Borrowers for whom it is costly to tap the credit markets directly will have access to less funding. If, as Diamond (1988) suggests, these borrowers represent young, profitable

enterprises which have not yet established a favorable reputation, then the narrow-bank structure may place a severe drag on future growth. Further, whatever synergies exist between deposit-taking and lending will not be realized.³³

Proposals for Reforming Deposit Insurance

If (absent deposit insurance) bank runs are either unlikely or innocuous and bank risk cannot be contained without depositor discipline, then deposit insurance is unnecessary or at least coverage should be kept to a minimal amount to protect only small savers. Conversely, if (absent deposit insurance) bank runs are likely and destructive and bank risk can be contained without depositor discipline, then deposit insurance with more than minimal coverage is desirable.

As stated earlier, the two principal effects of deposit insurance are to eliminate both bank runs and depositor discipline. The elimination of bank runs enhances financial stability because it lessens the threat of disruptions to the money supply process, the payments system, and financial intermediation. The removal of depositor discipline can reduce financial stability because it provides an incentive for banks to take excessive risks. This presents society with a cost-benefit trade-off regarding deposit insurance.

While some reform proposals have focused on restructuring the financial system to alleviate the need for deposit insurance, most reform proposals

focus on redesigning the way deposit insurance is provided. These reform proposals typically call for greater reliance on market discipline, risk-related pricing of deposit insurance and less reliance on regulatory discretion in closing institutions. An analysis of these reform proposals involves an evaluation of the effectiveness of the present system, which relies primarily on supervision and regulation, and an assessment of the costs and benefits associated with the proposed reforms. Even if the FDIC has been effective in regulating banks, reform may be needed if the alternatives provide a less costly way of ensuring bank safety and soundness.

The feasibility and the cost of these proposals depend in large part on the ability of the FDIC and outside investors to measure bank risk and the value of bank assets accurately. As discussed earlier, the primary assets held by commercial banks are loans. Commercial and consumer loans are generally not marketable because of the considerable cost an investor would incur in evaluating the quality of the loan. Indeed, Fama (1985) and others have argued that bank loans are different from publicly placed securities because of the extensive credit evaluation and monitoring required of the bank. The nature of bank assets therefore makes the assessment of bank risk more difficult.

Different assumptions concerning the ability of the FDIC or outsiders to evaluate bank risk form the basis for much of the debate on deposit insurance reform. For example, if one assumes that outside investors can evaluate the value of bank assets accurately at a small cost and that costs associated with resolving bank failures are small, then proposals that establish rules for timely closure will impose few costs in terms of the

erroneous closure of solvent institutions.³⁴ Moreover, uninsured depositors can be relied upon to price risk accurately. Finally, there would be few distortions associated with explicit risk-related premiums or risk-related capital standards. However, if the assessment of the riskiness of a bank's portfolio is difficult and costly, then more reliance should be placed on the examination process and bank supervision. Moreover, the more complex the task of risk assessment, the less efficient will be policies that require strict adherence to predetermined standards.³⁵

To summarize, much of the debate concerning deposit insurance reform focuses on the effectiveness of the current system of regulation and supervision and the efficiency associated with alternative systems that place greater reliance on the explicit pricing of risk or on market discipline. An assessment of the reform proposals depends in large part on what assumptions are made about the nature of bank assets.

FOOTNOTES

¹See Edwards and Scott (1979) for a thorough discussion of the reasons for government intervention into depository institutions and an assessment of the appropriateness of various forms of intervention.

²See Gorton and Pennacchi (1988).

³Fama (1980) and Goodfriend and King (1988) argue that money creation can be separated from banking.

⁴The Federal Reserve can maintain the desired level of the money supply through open-market operations.

⁵The notion that money is neutral with respect to real output and employment is a long-run concept. In the short run, most would agree that unanticipated changes in the money supply can affect real output and employment because of rigidities in input and output markets.

⁶Edwards and Scott (1979), p. 81.

⁷Johnson and Roberts (1985), p. 164.

⁸By performing this transformation, intermediaries typically assume some form of risk.

⁹Goodhart (1987), p.86. Fama (1985) and James (1987) take this one step further by arguing that banks' interaction with their customers as both depositors and borrowers enhances their ability to monitor the repeat-type, short-term loans that banks offer. Knowledge of a customer's history as a depositor allows the bank to evaluate the credit risk of the same customer more cheaply than other lenders. Thus, there may be a synergy between deposit-taking and the special types of loans that banks offer.

¹⁰See Bernanke and Gertler (1988); Bernanke (1983); Diamond (1984) and (1988); and Boyd and Prescott (1986).

¹¹Note that the illiquidity of the assets is essential for the argument: if all productive assets were liquid, people could provide their own liquidity without the need for the bank.

¹²Diamond and Dybvig (1986), pp. 57-58.

¹³"Equilibrium" value as used here refers to the price obtainable given the normal amount of time for the necessary information-gathering by prospective buyers (see Kaufman (1988)).

¹⁴Coase (1937) characterizes the firm as a device for avoiding the excessive transactions costs associated with spot-market trading. This notion is widely recognized as essential to the explanation of banking's original development in free markets. See Woodward (1988), Bernanke (1983), Goodhart (1987), and the literature cited therein. As noted in the following text, this notion is necessary but not sufficient to describe what may be unique about banks.

¹⁵Even if runs are not widespread, bank runs can disrupt the communities in which they occur. This local externalities problem also has been offered as a reason for providing deposit insurance.

¹⁶Bernanke (1983), p. 264.

¹⁷The FDIC also has a \$3 billion credit line with the U.S. Treasury.

¹⁸The risk premium required by depositors could be decomposed into two components: one compensating for the "normal" risk, i.e., credit, interest-rate, and operating risk; and one compensating for the risk of losses resulting from being last in line in a bank run.

¹⁹Note that the risk premium the insurer would charge would not need to include the component associated with the risk of runs (as discussed in the previous footnote) because deposit insurance has eliminated that risk. That component can be viewed as the measure of the social benefit of a mechanism that eliminates bank runs. There are, of course, costs associated with such mechanisms.

²⁰Flannery (1982).

²¹ = \$100 - \$90.

²² = \$120 - \$90.

²³ = $1/2 \times \$0 + 1/2 \times \30 .

²⁴The payment to depositors net of the value of the assets.

²⁵ = $1/2 \times \$0 + 1/2 \times \10 .

²⁶See, respectively, Buser, Chen and Kane (1981); Benston, Eisenbeis, et. al. (1986); and Kim and Santomero (1988). Actually, there are more options: The insurer can require coinsurance, extended shareholder liability, or capital punishment for unsuccessful bankers.

²⁷Marcus (1984); and Buser, Chen and Kane (1981).

²⁸If the lender of last resort agrees to fund withdrawals from all institutions, then it bears the loss when an insolvent bank is closed (just as the FDIC does now). Presumably, it would charge banks for this risk-bearing, and would require examination and supervisory powers similar to those currently held by the FDIC. At this point it would be more than Bagehot's lender of last resort; it also would be a deposit insurer.

²⁹Friedman and Schwartz (1963) argued that the Federal Reserve's failure to offset withdrawals in 1930, and again in 1931, allowed a severe, but not atypical, recession to develop into the Great Depression.

³⁰This static analysis is intended only to provide an idea of the relative magnitudes involved. If the narrow-bank structure were adopted, one would expect the price of short-term debt to rise relative to long-term debt, thus steepening the yield curve.

³¹See James (1987).

³²Note that these firms neither will be regulated nor supervised.

³³A third alternative to deposit insurance is to eliminate the debt features of bank deposits. In particular, banks could offer an account similar to a claim on a mutual fund, with a value that fluctuated with the value of the bank's assets. A deposit run that forced a bank to liquidate its assets would result in claims of the bank being revalued at a price determined by the liquidation value of the bank's asset portfolio. (See Jacklin (1988)).

³⁴See Benston and Kaufman (1985). This proposal involves rules that would mandate the closure of institutions with primary capital below a specified minimum (say, six percent). The owners of capital-deficient institutions would be provided the opportunity to raise additional capital to bring them into compliance with the standard. This proposal assumes that bank management can convey to potential outside investors in a timely and accurate fashion the present value of the bank's assets.

³⁵If there is a large potential for error in measuring asset values or risk, then strict adherence to predetermined standards will involve a large number of errors. Whether such a policy would be optimal will depend on the benefits associated with strict adherence to rules versus the costs associated with mistakes.

Chapter 3

DEPOSIT INSURANCE PRICING

Regardless of their financial condition, all FDIC-insured banks pay the same statutory rate (one-twelfth of one percent of total domestic deposits) for deposit insurance and share proportionately in any premium rebates.¹ As a result, deposit insurance rates do not vary with the level of risk that a bank poses to the insurance fund. This system of flat-rate premiums has been criticized on the grounds that it encourages excessive risk-taking and that it inequitably distributes the burden of insurance losses among banks. While most observers agree that there are shortcomings with the flat-rate system, the development of a feasible risk-related pricing scheme has proved difficult and most practical proposals fall far short of an ideal pricing scheme.

Although the insurance fund has been more than adequate to handle insurance losses during the 55 years of the FDIC's existence, there are good reasons to review our pricing policies. First, there have been substantial changes in the banking industry over the last decade. Changes in the regulatory, economic, and technological environment may have created new incentives and opportunities for risk-taking. Thus, the past may not be a good indicator of the appropriateness of our current pricing system.

Moreover, insurer solvency only means that, on average, insurance premiums have been sufficient to cover losses. Allocative inefficiencies still could exist in the sense that some banks may be charged too much and others too little, given the risk they pose to the insurance fund. In effect, more-conservatively-run banks may be paying for the excesses of others and banks that elect to take advantage of risk subsidies will grow relative to those that do not.

In the first section of this chapter the pricing problem is discussed, including the implications of mispriced deposit insurance and the difficulties of properly pricing deposit insurance under conditions of asymmetric information and systemic banking risks. This is followed by a review of various proposals for risk-related premiums. Next, major policy considerations in selecting a pricing scheme are discussed, including: the desirability and feasibility of using market information to set prices, the desirability of placing greater reliance on explicit pricing (versus the current use of implicit pricing) and the feasibility of using ex post measures of risks. The chapter concludes that, while risk-related premiums will not totally eliminate incentives for excessive risk-taking, a system could be implemented that would be an improvement over the current system. A related pricing issue concerning the adequacy of the fund and the adjustment of the overall premium level to reflect experience and costs over time is discussed in Chapter 8.

The Pricing Problem

Implications of Mispriced Deposit Insurance

An ideal deposit insurance system would:

seek to reduce the probability of bank panics, with their associated real sector impacts, while minimizing (any) resource misallocation costs resulting from the supply of that insurance. Specifically, it should allow for the exit from the industry of unsound, poorly managed banks, while both protecting the banking system against widespread panics and ensuring that bank risk-taking is neither subsidized nor inefficiently discouraged.²

The challenge, then, is to provide the benefits of deposit insurance without causing banks to make uneconomic investment decisions. If the provision of deposit insurance presents banks with a risk-return trade-off that does not reflect market realities, bank investment decisions will be distorted and resources will not be allocated toward the production of those financial services most highly valued by consumers. This misallocation of resources may have significant implications for the size and risk characteristics of the banking industry.

At the industry level, the deposit insurance premium can act as a subsidy or tax, depending on whether the premium is below or above the premium that would be set in a competitive market. The provision of a credible guarantee to pay off depositors in the event of a bank's insolvency allows insured institutions to attract deposits at a risk-free rate (or at some rate less than the proper risk-adjusted rate) and, thus, gives them a competitive advantage over uninsured institutions. If this advantage is not offset by charging insurance premiums (either explicitly or implicitly through

supervision and regulation) sufficient to cover potential insurance losses, depository institutions will have competitive advantages over other providers of financial services. In essence, in order to expand their business, insured institutions can offer part or all of their subsidy to depositors or to borrowers. Thus, the subsidy would allow the industry to grow beyond the size that would result from a purely competitive process, growth that would come at the expense of uninsured providers of financial services. Conversely, setting insurance prices too high would act as a tax on the industry. Banks would be at a competitive disadvantage relative to uninsured institutions, and either banks would drop their insurance or resources would be diverted from banking to other financial-service providers.

Mispriced deposit insurance most often is discussed in terms of its implications for the risk-taking behavior of depository institutions. The current flat-rate system has been criticized because it creates incentives for banks to increase their portfolio risk. Market participants are normally confronted with a risk-return trade-off: higher yields can only be obtained at the expense of greater risks. In the absence of deposit insurance, the gains that stockholders may realize from moving to riskier positions would be limited by depositors, who would demand additional compensation for increased risk-taking by the bank.

However, with the introduction of deposit insurance, insured depositors no longer require risk premiums since their investment is safe and, under a flat-rate premium structure, banks' insurance costs will be the same regardless of their risk position. As a result, banks may take on additional risk without having to pay higher interest rates on deposits or higher

insurance premiums. From the bank's (stockholder's) perspective, the increased return that results from taking on any additional risk is greater under a flat-rate system than it would be under a properly priced system. The risk-return trade-off has been altered such that the price of assuming greater risk has been reduced and, consequently, the bank will move to a riskier position.^{3,4}

Thus, there are two aspects to the mispricing of deposit insurance. First, if the overall level of insurance prices is not equal to prices that would be set in a competitive market, deposit insurance will act as an industry subsidy or tax, and insured institutions will be at a competitive advantage or disadvantage relative to uninsured institutions. Second, the flat-rate pricing system provides incentives toward greater risk-taking, with the result that some risky investment projects will be undertaken that would not otherwise have been undertaken. As a consequence, bank failures are likely to be more numerous and more costly. In the end, the costs of increased risk-taking will be shifted to the federal insurer, and possibly to the taxpayer.

It should be noted, however, that under a flat-rate system there are still important counterbalances to increased risk-taking. First, to the extent that uninsured liabilities are at risk, debt holders will exert some discipline on bank risk-taking. More importantly, stockholders and management have financial stakes in the survival of the institution. Their aversion to risk will place limits on management's risk-taking activities. Thus, while a flat-rate system generally will lead to greater portfolio risk (an exception

is noted in footnote 3), it does not necessarily imply that institutions will take unlimited risks.

In practice, risk-taking also is limited by the fact that commercial banks pay more than the explicit premium for deposit insurance. The provision of deposit insurance requires that insured institutions submit to federal supervision and regulation. Federal regulators periodically examine banks to determine if they are engaged in safe-and-sound banking. Undesirable behavior is penalized through issuance of cease-and-desist orders, removal of bank officers or directors for certain violations, and the levying of fines. In addition, regulations limit insured institutions from engaging in certain financial activities and set minimum capital requirements. These regulations and supervisory sanctions limit the ability of some (but not all) banks to engage in overly risky activities and they represent an implicit cost of obtaining federal guarantees. To the extent that these implicit costs vary with the riskiness of the bank, they act as a system of risk-related premiums and constrain risk-taking.⁵

Asymmetric Information Problems

Ideally, the solution is to set insurance premiums to reflect differences among banks in the expected (ex ante) costs they pose to the insurance fund and the economy. These costs would include the expected costs of resolving each bank's potential failure (probability of failure, multiplied by the costs of resolving the failure); the FDIC's monitoring, surveillance, and auditing expenses; and any third-party costs⁶ that may be borne by

parties other than the FDIC and the failed bank (Merrick and Saunders (1985), p. 705). To determine appropriate risk-related premiums ex ante, however, requires that the insurer obtain information about the insured's risk type (i.e., high-risk, medium-risk, low-risk, etc.), information that may not be easily obtained.

Nearly all insurance settings are characterized by asymmetric information concerning the insured's risk type, i.e., the insured possesses better information about his or her risk type than does the insurer. For example, automobile drivers know their own driving patterns and behavior better than the insurer and, if they were honest with themselves, could better assess their own risk than could the insurer. However, high-risk drivers have incentives to hide their true risk characteristics and to pose as low-risk types. In order to overcome this problem, insurers will attempt to bridge the information gap by using actuarial information to make ex ante judgments about a driver's risk type based on age, sex, etc.. The insured's driving record (traffic tickets, accidents, etc.) can be used to obtain ex post information about the driver's risk type. Of course, even with this information the insurer will not know the driver's true risk type with certainty. For example, not all individuals who receive traffic tickets or not all teenagers are risky drivers. But the information does allow insurers to make more accurate estimates of a driver's true risk type.

Although automobile insurance differs from deposit insurance in many respects, the example helps to illustrate the general problems associated with asymmetric information. Just as in the case of drivers, banks possess more information about their risk type than does the FDIC. Moreover, determining a

bank's risk type ex ante is arguably more difficult than in most insurance settings. A major function of banks (as well as other intermediaries) is to assess the risks of lending to idiosyncratic borrowers. For many of these borrowers, public information on their economic condition and prospects is so limited and expensive that the alternative of issuing marketable securities is not economically viable (Goodhart (1987), p. 86). Thus, banks specialize in obtaining information about the very events (credit risks) that are most likely to result in a loss to the insurer.⁷ Because of this specialized knowledge, the ex ante information gap between the insurer and the insured is perhaps larger than in most other insurance settings.⁸

It also is arguable that ex post information on an insured's risk type is of less value in the case of deposit insurance than in many other insurance settings. Information concerning a driver's traffic violations or accidents often can be used to adjust premiums before the insurer suffers significant losses. Information that a bank is encountering financial difficulties, however, may not be obtained in time to avoid substantial losses.

Adverse Selection

Asymmetric information leads to a basic problem confronting all insurers: the problem of adverse selection. Adverse selection refers to the incorrect classification of a client's risk type as a result of incomplete information and the incentive of the client to misrepresent his or her risk type. Thus, many high-risk clients will attempt to pose as low-risk types and some low-risk clients may elect to take no insurance at all. The net result

is that categories with high-risk premiums will tend to be underrepresented and categories with low-risk premiums will tend to be overrepresented. Thus, even if a premium structure is appropriately designed to break even, adverse selection may result in the insurer incurring losses.⁹

The insurer can reduce the adverse selection problem by obtaining more information about the client. Of course, the benefits of greater information (more-appropriately-priced insurance and lower insurance losses) would have to be weighed against the costs of obtaining that information (costs of additional resources needed to obtain information).

Another solution to the adverse selection problem is to offer incentive-compatible contracts. For example, automobile insurers offer varying amounts of deductible insurance in combination with different premium rates. If a driver feels that he or she is a particularly safe driver, he or she probably will opt for a relatively high-deductible, low-premium contract, and vice versa for a high-risk driver. By allowing insurance contracts to vary by more than one characteristic, for example, price and coverage, the incentive-compatible contract is designed to induce insureds to signal their true risk type.¹⁰

An incentive-compatible deposit insurance contract could involve offering banks the choice of various price/capital combinations. Banks that choose higher capital levels (these could be adjusted for loan quality) would pay lower insurance premiums, and vice versa. The idea is that obtaining additional capital would be less expensive for low-risk banks than for high-risk banks. Thus, low-risk banks would prefer to select a

high-capital/low-premium combination, while the opposite would be true for high-risk banks. The goal would be to adjust the price/capital combinations so that the long-run revenues of each risk category would be sufficient to cover long-run costs. In doing so, each risk category would be paying an actuarially fair premium and cross-subsidization between risk classes would be eliminated.

In banking, the difficulty is determining when the revenues of any particular category are sufficient to cover expected costs. In casualty insurance, this is relatively easy since the events being insured against are normally-occurring events that are fairly evenly distributed over time. As a result, an automobile insurer will learn in rather short order whether the premium revenues are sufficient to cover the long-run costs of any risk category. However, bank failures are not evenly distributed over time. Instead, they tend to be associated with the business cycle or economic shocks. In this environment, adjusting the price/capital combinations so that the long-run revenues are sufficient to cover the long-run costs of each risk category would be a lengthy learning process.^{11,12}

In summary, the idiosyncratic nature of many bank assets makes banks privy to a substantial amount of nonpublic information. Moreover, it is precisely this information that is most needed to assess the risk that individual banks pose to the FDIC. The FDIC could better assess these risks ex ante by obtaining more bank-specific information (which is already done to some extent through the bank examination process), but obtaining highly accurate information may be prohibitively expensive. In many other insurance settings these information asymmetries are overcome more cheaply by developing

incentive-compatible contracts. However, the ability to efficiently develop incentive-compatible contracts on an actuarial basis requires that the events being insured against are normally-occurring, independently-distributed events. The fact that there are systemic risks in banking greatly complicates the development of incentive-compatible contracts.

Moral Hazard

The pricing problem does not end with the establishment of the terms of the insurance contract. After obtaining insurance the client may act in a manner that increases the insurer's potential losses. In insurance parlance, this problem is referred to as moral hazard. The moral hazard problem will vary depending on the extent to which the insured has incentives (normally financial incentives) to take actions that increase his or her risk and the extent to which these actions are unobservable by the insurer. In the context of banking, insured institutions may be inclined to take additional risks because of the additional financial rewards they may yield.

In many insurance settings, moral hazard often is controlled by making the insurance payout contingent on the insured party acting in a specified manner. For example, an insurance company will not pay off on fire damage if the insured party commits arson. However, payouts to depositors contingent on bank behavior would not be feasible, since it would reintroduce the problem of bank runs.

Alternatively, the moral hazard problem may be dealt with by monitoring bank behavior (examinations) and imposing penalties when undesirable behavior is observed. A number of proposals have been made to expand current penalties so as to expose stockholders and managers to more downside risk in the event that the bank's investment decisions turn out to be bad. For example, ex post settling-up or extended stockholder liability schemes could extend the potential losses of owners beyond their initial equity investment (see Benston, Eisenbeis, et. al. (1986), pp. 242-43). Greater exposure to more downside risk would limit the gains from increased risk-taking and, therefore, lessen the moral hazard problem.¹³

Proposals for Risk-Related Premiums

There is widespread acceptance that a flat-rate premium structure by itself creates perverse incentives toward greater risk-taking and penalizes more-conservatively-run institutions. There is less agreement whether a more explicit risk-related pricing system could be developed that would be a significant improvement over the current system. A number of proposals for establishing risk-related premiums have been made; each has some advantages and disadvantages when compared to the current system. These proposals generally can be categorized into those that try to incorporate the market's assessment of bank risk and those that rely on the public insurer's assessment of risk.

Using Market Information to Assess Risk

Several methods that rely on the use of market information to price deposit insurance are found in the literature, including the use of private deposit insurance, private coinsurance of deposits, uninsured deposits, and option pricing theory. Each of these briefly is discussed below.

The use of private insurance has been suggested as a means of correcting for governmental mispricing of deposit insurance. Short and O'Driscoll (1983) suggest that there should be larger roles for private insurance. Specifically, they argue that the lack of competition leads to underpricing and, therefore, subsidization on the part of the federal insurer. However, the existing evidence on private deposit insurance suggests that the desired results may not be realized.

Historically, state-sponsored "private" insurance funds, from the New York Safety Fund of the early nineteenth century to the more recent examples of Maryland and Ohio, have been unable to protect depositors and, in turn, the financial system during crises. Indeed, the inability of a private insurer to contend with the threat of systemic risk is the major drawback to the use of a private system of deposit insurance.¹⁴ One way in which private insurance could deal with the threat of systemic risk would be through the use of 100 percent reserves against insured deposits, held by the insurer in the form of riskless securities. However, a 100 percent reserve policy is not a viable alternative, given considerations of monetary policy and impracticalities at the individual insurer level.

Campbell and Glenn (1984) address the issue of systemic risk and private insurance from a slightly different angle. They argue that unless deposit insurance contracts are long-term in nature, intertemporal adverse-selection problems are likely to arise. For example, banks would choose to be insured only during periods when they expected a high probability of default. On the other hand, private insurers would demand the option to cancel insurance, an option that would be increasingly exercised during periods of banking difficulties. Of course, banks legally could be required to purchase insurance, but it would seem to be impracticable to deny private insurers the right to cancel insurance during periods of economic stress. Campbell and Glenn argue that this intertemporal adverse selection would render a private system unworkable. This inability to handle systemic problems (i.e., insufficiently deep pockets) leads to the conclusion that a purely private-sector resolution of the problems associated with mispriced deposit insurance is not feasible.¹⁵

Baer (1985) suggests that the shortcomings associated with public and private systems of deposit insurance can be avoided through a system of private coinsurance. Under this proposal, production and pricing would be separated: government would provide most of the insurance, while private insurance companies would determine insurance prices. For any given bank, some relatively small percent of deposits would be insured by the private insurer and the remainder would be insured by the federal insurer. In the event of a bank failure, private insurers would be responsible for paying off their portion of the bank's insured deposits, and would share losses on a pro rata basis. Private insurers would provide market-based prices for both private and federal insurance.

In Baer's scheme, the private insurer is required to hold 100 percent reserves against the deposits that it insures. This requirement guarantees that the private insurer never can go bankrupt and, therefore, always will be able to cover insured deposits. In this case, the private insurer would have the means to maintain public confidence and, in turn, contend with the threat of systemic risk. The goal of coinsurance would be to create a pricing structure in which the respective abilities of government and the private sector to estimate externalities and to assess risk are captured. This is accomplished by requiring private insurers to bear the same costs (on a pro rata basis) as the federal insurer, and by relying on private insurers to accurately assess risk. The question remains whether private insurers could ever be profitable with the 100 percent reserve requirement.¹⁶

Baer also points out that the coinsurance scheme just outlined could be closely approximated by basing premiums on the risk premium paid to nonsubordinated debt holders (as opposed to subordinated debt). Like private insurers, these debt holders would suffer losses on a pro rata basis with the federal insurer. Therefore, instead of creating a complex system of coinsurance, basing premiums on newly issued nonsubordinated debt (all banks would be required to issue a minimum amount) could achieve a similar result.¹⁷

Deposit insurance provides explicit coverage for deposits of \$100,000 or less, leaving uninsured those deposits greater than \$100,000. It has been proposed that insurance premiums could be based on the market rates paid on these uninsured deposits (Peltzman (1972), Thomson (1987)). This approach is based on the idea that depositors will demand a risk premium if they perceive

that their uninsured deposits are at risk. Since depositors could place their uninsured funds in an alternative investment with the same level of risk (e.g., a money market or bond fund), there should exist a similar risk premium with either investment option.

There are, however, several limitations to this approach that stem from market imperfections. First, investors may perceive that large banks will not be allowed to fail. This expectation of de facto coverage for uninsured depositors may obviate the need for uninsured depositors to demand a risk premium, especially in the case of large banks. Second, if the market for deposits is not perfectly competitive or if transactions costs prevent the removal of pricing errors when they occur, these imperfections will be reflected in rate differentials between insured and uninsured deposits. For example, the FDIC currently assesses premiums against total deposits instead of only insured deposits. This creates a disincentive on the part of the bank to pay the full risk premium to the depositor. Finally, if insurance premiums are priced in this manner, riskier banks will have an incentive to parcel large uninsured deposits into multiple, insured accounts. As a result, the observed risk premiums would not reflect the full range of bank riskiness.¹⁸

As the above comments suggest, the rate paid on uninsured deposits may not accurately reflect the risk premium that should be charged. Indeed, the very issuance of uninsured deposits suggests the presence of market imperfections, in that either insurance is being implicitly provided or that it is too costly for uninsured deposits to be parceled. Thus, the very fact that banks issue both types of deposits implies that the conditions required to price deposit insurance using uninsured deposits are not present.

Option pricing theory also has been proposed as a way of utilizing market information to price deposit insurance. In this literature, deposit insurance is shown to be analogous to a put option. In general, the owner of a put option on an asset has the right to sell that asset at a specified (exercise) price to the writer of the option contract on some future date. If, at the maturity of the option, the asset price is above the exercise price, the option will not be exercised. However, if the asset price is below the exercise price, the option will be exercised, and the owner will realize a gain equal to the difference between the exercise price and the asset price.¹⁹

Merton (1977) was the first to suggest that option pricing theory could be used to determine the value of deposit insurance to a bank. He argued that in purchasing deposit insurance, the bank essentially has purchased a put option, and has the "right" to transfer its insured liabilities to the insurer under certain conditions. If the value of the bank's assets falls below the bank's obligations to insured depositors, the insurer will appropriate the bank's assets and, in turn, pay off insured depositors. The bank essentially has purchased the option to sell its assets to the insurer at a price equal to the value of the bank's insured liabilities. This option has value to the bank because it makes insured deposits perfectly safe and allows the bank to attract deposits at the risk-free rate.²⁰

The option pricing framework, as developed by Black and Scholes (1973), serves as the foundation for the development of a general theory of the valuation of contingent-claim assets, i.e., assets whose value is a nonproportional function of the value of another asset (see, for example,

Smith (1976)). In the Black-Scholes formula, the value of a put is a function of five variables. When applied to the problem of pricing deposit insurance these five variables are: (i) the value of the bank's assets; (ii) the variability of the value of the bank's assets; (iii) the exercise price, which is measured by the total amount of insured deposits; (iv) the risk-free interest rate, which enters the formula as the discount rate over the lifetime of the option; and (v) the time to maturity or lifetime of the option.

A change in the value of any one of these factors will, in turn, affect the value (or price) of deposit insurance. For example, if the value of the bank's assets were to decrease relative to the value of its liabilities, the value of the put (or deposit insurance) to the bank's owners would increase. As the variability or volatility of the value of the bank's assets increases, the value of the put and deposit insurance to the bank's owners increases. As the total amount of insured deposits, or the exercise price, increases, the value of the put increases. The value of the put also increases if the risk-free rate of return decreases. Finally, the lifetime of the put option, measured by the time between bank examinations, has an ambiguous effect on the value of the put, since it affects the present value of the exercise price (because the time of the put is increased) and the likelihood of a future bank failure, but in opposite directions.²¹

The insurance premium as given by the option pricing formula will be sensitive to the assumptions of a constant, risk-free interest rate and constant variation in the value of bank assets. The assumption that the risk-free interest rate, which is the discount rate of the option pricing formula, remains constant is a problematic assumption. For example, it is

clear that the variability of interest rates over the past decade has aggravated the asset/liability problems of banks and thrift institutions, and that banks' and thrifts' asset values have not been constant. Smith (1976) has shown that variable interest rates and non-constant variance can be further modeled into the option pricing formula, however, at the cost of further model complexity.

The ability of standard option pricing models to provide "fair" insurance premium estimates has been questioned for several reasons. It has been suggested that because the relationship between the variance of stock returns and the variance of returns on underlying assets is quite complex (particularly when the assumptions of the model are relaxed), the asset-return volatility measures used in empirical studies may be misspecified. For example, Brickley and James (1986) show that the forbearance policies of the insurers can affect the value of deposit guarantees. As a result, the use of stock-return data to infer the variance of booked assets may result in serious errors. (The variance of stock returns may provide a downward-biased estimate of the variance of asset returns, resulting in an underestimated value of deposit insurance.) In addition, the traditional reliance on historical bank stock-return data to impute asset-return volatility has been questioned. It lacks "forward-looking" information, such as the information found in implicit market forecasts of future asset volatility (see Merrick and Saunders (1985); and Chiras and Manaster (1978)).

A further shortcoming is cited by Pyle (1983), where it is shown that the insurance premium can be quite sensitive to measurement errors in either the value or the riskiness of the bank's assets. The model is found to be

particularly sensitive to errors in measuring the value of bank assets. This is especially so for those banks not publicly held and for which only accounting data are available.

One possible solution for nonpublic banks is to use an asset valuation model, such as the capital asset pricing model (CAPM), in conjunction with the option pricing framework to estimate the value of the firm. For example, the value of equity for a firm can be estimated using an option pricing framework. Then the "value of equity" can be incorporated into the CAPM to determine an estimate for the "value of the firm." This estimate would serve as a proxy for the publicly traded value of the bank in the option pricing formula. While this methodology has been developed in theoretical terms (see, e.g., Galai and Masulis (1976)), it has not undergone extensive empirical testing.²² Further development in this area would be required before an option pricing framework could be successfully applied to price deposit insurance for banks whose stock is not publicly traded.

The feasibility of using option pricing theory to price deposit insurance will depend on the ability of the insurer to adequately measure the return volatility of bank assets in a timely manner. As with all variable-rate pricing schemes, the more difficult the task of accurate risk measurement, the less attractive variable-rate insurance becomes. Even though an option pricing scheme for deposit insurance may be difficult to implement, the theory, nonetheless, provides insight into the factors which affect the optimal pricing of deposit insurance.

Using Nonmarket Information to Assess Risk

When it is not possible or when it is undesirable to utilize the market's assessment of bank risk, the federal insurer would be left with the task of developing its own methods for assessing risk. Various proposals that would permit the FDIC to administratively determine variable-rate premiums have been made, including the FDIC's own proposals (FDIC (1983); Hirschhorn (1986)). Some of these proposals attempt to measure risk ex ante; that is, they attempt to measure the inherent risk of banking activities regardless of the bank's current performance. Most proposals, however, have relied primarily on ex post measures of risk, those that measure risk after it has materially affected the performance of the bank.

Charging banks risk premiums by measuring ex ante risks has the advantage of discouraging risky behavior before it adversely affects the performance of the bank. Not surprisingly, devising such a system is difficult. Ex ante approaches to risk measurement have generally sought to measure various components of risk that are thought to be inherent in the business of banking. These components might include interest-rate risk, credit risk, operating risk, liquidity risk, diversification risk, and the risk of fraud or insider abuse. While there may be acceptable ways to measure some of these individual risk components (most notably interest-rate risk, although banks do not now report the kind of information that would be required), attempts to measure and aggregate all of the various components have been largely unsuccessful (Maisel (1981)).

The risk-based capital guidelines proposed by the three bank regulatory agencies are an attempt to apply ex ante measures of perceived credit risk. The plan would classify assets according to their perceived risk of default, with cash and Treasury bills requiring the least amount of capital and loans requiring the most.

There are several questions regarding this approach, including whether or not the proposed risk classifications will appropriately weight credit risk²³, whether intraclass substitutions will thwart the goal of reducing risk, and whether this proposal is too narrowly focused on a specific form of risk. However, since the federal regulators already require minimum capital standards (5.5 percent primary capital), these criticisms could equally apply to the current weighting scheme. (Under the current system, 100 percent of on-balance-sheet items and zero percent of off-balance-sheet items are subject to capital requirements.) The relevant question is whether the proposed weighting scheme is an improvement over the existing weighting scheme.²⁴

It has been suggested that information derived from the regulatory agencies' onsite examinations could be used as a basis for risk-related premiums. As a result of the examination process, each bank is assigned an overall rating from 1 to 5 (5 being the worst) based on the bank's financial condition. This rating is commonly referred to as the CAMEL rating and is derived from the examiner's evaluation of a bank's capital adequacy, asset quality, management, earnings and liquidity. Perceptions of ex ante risk play some role in the determination of CAMEL ratings, since examiners evaluate management's policies and practices that influence the bank's future performance. In the areas of capital adequacy, asset quality, and earnings,

however, perceptions of risk are largely based on the bank's current performance.

A major objection to using examination ratings as the sole basis for assigning risk premiums is that it could have a negative impact on the examination process. One of the advantages of onsite examinations is that they allow examiners to use their experience and judgment to tailor their assessments and solutions to unique situations. However, because of the financial stakes involved with basing premiums on examinations, extreme care would need to be taken to ensure the application of uniform standards and procedures for rating banks. With greater reliance on rules and procedures for assigning premiums, an important attribute of onsite examinations--examiner discretion--may be lost. Further, basing premiums on examinations introduces an adversarial relationship into the examination process, and the flow of information that normally occurs during an examination undoubtedly would be reduced. While there are punitive aspects to the examination process, the purpose also is to provide useful information to bank management about the soundness of its operation and about how it may be improved. Increasing the financial stakes of the examination outcome would lessen the extent to which an examination could serve this purpose.²⁵

Some proposals for risk-related pricing schemes have been based on information provided by bank-failure-prediction models.²⁶ Failure-prediction models utilize historical information to determine the importance of various financial variables in predicting the success or failure of an institution. Those financial variables (e.g., measures of nonperforming loans, earnings, capital levels, etc.) that have been consistent predictors of

past failures can then be used as a basis for a risk-related pricing system. That is, pertinent financial data can be used to estimate the likelihood of failure for currently operating institutions, and insurance premiums can be assigned on the basis of each bank's probability of failure. More recently, these types of models have been modified to estimate each bank's expected insurance cost (roughly equal to the probability of failure, multiplied by the FDIC's average cost when a bank fails). The expected cost then can be used as an estimate of the risk-related portion of the insurance premium (Avery, Hanweck, and Kwast (1985)).

Not surprisingly, the financial variables that turn out to be most successful in predicting failures are primarily ex post measures of risk and, as a consequence, the predictive power of these models declines rather rapidly when predicting failures much beyond a year. For example, in a recent FDIC proposal (Hirschhorn (1986)) the financial variables that did the best job of replicating the problem bank list included variables describing a bank's capital level, its earnings performance, and the quality of its loans. Using a model based on December 1983 Call data and limiting the designation of high-risk banks to roughly 20 percent of all banks²⁷, the model classified about 90 percent of all failures in 1984 as high-risk banks. However, using the same model (i.e., based on 1983 Call data) only about 60 percent of the failures in 1985 were classified as high risk. This profile is common in failure-prediction models, and illustrates the difficulty in detecting and pricing risk in a timely manner.²⁸

More recent suggestions for structuring a risk-related system include the use of varying combinations of the previously mentioned approaches

(Benston, Eisenbeis, et. al. (1986), p. 237). For example, statistical models utilizing Call Report data could be used to estimate the risk of failure or the expected cost to the FDIC. Premiums based on these estimates could be double-checked by noting the rates paid on uninsured deposits or other uninsured debt, or by using option pricing techniques. A drawback to using more than one method for determining risk premiums is that it would be less easily understood by the banking industry, and any perceived inequities would be more difficult to defend.

A more recent proposal for risk-related premiums involves an ex post settlement for failed banks (Benston, Eisenbeis, et. al. (1986), pp. 242-43; Merrick and Saunders (1985), pp. 707-08)). As a condition for receiving federal insurance, banks could be required to establish an escrow account with the FDIC, or bank shareholders could be legally subject to extended liability. In the event of a failure, ex post penalties could be assessed depending on the insurer's actual loss experience. Extended liability would expose the bank to an extended set of negative outcomes resulting from its investment behavior (and thereby lower its expected return), rather than limiting the set of negative outcomes to its initial equity investment. Such a system of ex post settling-up may provide the bank with incentives approaching those that would exist with ex ante measures of risk.

A general problem with these types of ex post settlement proposals is that they may result in increased costs for all commercial banks regardless of their current risk position. Extended liability for stockholders will increase the costs of retaining and attracting capital, since stockholders will demand additional compensation for the increase in their potential losses

should the bank fail. Requiring banks to maintain escrow accounts is equivalent to increasing capital requirements, while restricting the earnings potential of the added capital. (It seems likely that bank earnings on the escrow account would be limited to Treasury bill rates.) While these proposals have the potential to reduce the incentives toward risk-taking, they also have the potential to significantly increase banks' cost of capital, regardless of the actual risk position of individual banks, and could overly restrict the growth of the banking industry relative to other financial-service providers.

Policy Considerations in Selecting a Pricing System

Market Prices versus Administered Prices

Several proposals that would base a system of risk-related premiums on market information have been made, such as basing premiums on the rates paid on uninsured liabilities, using premiums assessed by private coinsurers, and utilizing option pricing models. Conceptually, the advantage of utilizing market information is that it represents the assessment of numerous individuals who have a financial stake in correctly assessing bank risk. Moreover, on a theoretical level, basing insurance premiums on those that would be set in unregulated markets would result in the optimum risk-return trade-off for the economy (assuming no third-party effects).

Despite these conceptual advantages, basing insurance premiums on some form of market information raises questions regarding the quality of market information that could be obtained and whether a market-based scheme would, in reality, lead to more accurate pricing. With respect to the quality of market information, most market-based approaches face some sort of information problem. For example, basing premiums on the rates paid for uninsured deposits would require well-developed markets for both large and small banks. Even if the FDIC were to abandon its policy of providing 100 percent de facto insurance in purchase-and-assumption transactions, regional interest-rate differentials and imperfect markets for small banks' uninsured deposits would make such an approach difficult to implement.

The informational requirements of option pricing techniques also present problems. In order to provide estimates of the value of deposit insurance for all banks, some estimate of asset returns (market returns) and their volatility over time must be made. The accuracy of these estimates, however, has been questioned (Brickley and James (1986)). And, as Pyle (1983) has pointed out, small errors in the estimation of the value of assets or their volatility can have major effects on the value of the option contract (i.e., the insurance premium). Moreover, even to the extent that asset returns are accurately measured, they represent historical returns and are not necessarily forward-looking. A further informational difficulty is knowing the appropriate closure rule. If assumptions concerning closure rules are wrong, the value of the put may be in substantial error.

A more fundamental question is whether the market's assessment of individual banking risks is measurably better than information derived from

other sources that are potentially available to regulators. A major reason why borrowers obtain loans from intermediaries rather than issue marketable securities is that public information on their economic condition and prospect is extremely limited and expensive. Thus, with respect to the quality of a bank's loans, the bank possesses information that is generally not publicly available.²⁹ To some extent, the very existence of banks (and other intermediaries) is explained by the inability of markets to act as efficient devices for valuing these idiosyncratic risks. If this is the case, we should not expect markets to be particularly efficient at evaluating credit risks in banking.³⁰

But would a system based on an option pricing model do a worse job than the current system or some other (nonmarket) risk-related system? In our judgment the answer is not clear and more investigation is needed. However, while the option pricing model appears to do relatively well at ranking the current financial condition of publicly traded bank holding companies at a point in time, from the studies reviewed it's not clear how well the model assesses risks in an ex ante sense or how well it establishes the appropriate premium level for a particular institution. For example, in looking at changes in bank risk-taking for 98 of the largest bank holding companies from 1981-86, Furlong (1988) estimated that the value of deposit insurance increased from an average of 2.4 one-hundredths of a basis point per dollar of deposit in 1981 to 2.6 tenths of a basis point in 1986. Even the much higher 1986 estimate represents only about 3 percent of the 8 basis points that banks currently are charged. On the other hand, assuming a less stringent closure rule, a study by Ronn and Verma (1986) estimated the average value of the insurance guarantee in 1983 (again for large bank holding companies) roughly

equal to the 8 basis points. The magnitude of these differences underscores the difficulties in implementing the option pricing model.

Another practical problem with using the option pricing model is that stock-market information is available only for the largest banking organizations. As was indicated earlier, a proxy for stock prices can be estimated, but it is not clear how well this kind of estimation technique would work. Moreover, where stock-price information is available, it only is available for the holding company and not for individual banks.

If it is not feasible to utilize market information in setting insurance premiums, then it should be recognized that an alternative risk-related scheme amounts to a set of administratively determined prices (either explicit or implicit). The question then turns on whether there are advantages to using more explicit pricing rules, rather than the current combination of regulation and supervision, and whether a method of administratively determined prices can be found that will lead to fewer pricing errors than the current system.

Explicit and Implicit Pricing

With respect to the first question, it is not immediately obvious that a system of explicit risk-related premiums has advantages over the more traditional forms of supervision and regulation (i.e., implicit pricing). Conceptually, implicit pricing can accomplish the same ends as explicit pricing. Banks can be dissuaded from having excessive loan concentrations

either by charging them higher insurance premiums or by issuing cease-and-desist orders (with appropriate sanctions if the order is not followed).

While in theory the same ends can be accomplished with either explicit or implicit pricing schemes, there are operational differences in the two approaches. From the regulator's perspective, implicit pricing generally offers some advantages in the form of greater flexibility and discretion. For many of the current forms of implicit pricing, such as letters of agreement and enforcement actions resulting from the examination process, regulators have considerable discretion in tailoring sanctions and solutions to individual cases. Even with a strictly formulated scheme of risk-based capital, regulators probably would be given considerable discretion in setting up timetables for banks to comply with once they fall below the standard. In short, the greater flexibility associated with implicit pricing allows regulators to use judgment and discretion in detecting and reacting to unique situations.

Of course, the opposite side of this coin is that implicit pricing will tend to be subjective and sometimes arbitrary. Rules or formulas are often advocated as a way of overcoming these shortcomings and as a way of ensuring that public entities act in an appropriate manner. Thus, explicit pricing formulas would have the advantage of ensuring uniformity and constraining regulators' behavior.

From a bank's perspective, however, explicit pricing may allow for a more flexible response. There always will be situations where some banks will

find it more costly than other banks to meet a given standard. For example, banks that fall below a capital standard temporarily and face relatively high costs in attracting additional capital may find it more cost-effective to pay higher insurance premiums and live with a somewhat lower capital level. With implicit pricing, no such choice exists (except at the regulator's discretion). Thus, an explicit pricing scheme may have the advantage of allowing banks to choose a more efficient means of dealing with a bad situation.

Another operational difference is that a system of risk-related premiums is apt to receive greater scrutiny by regulators, banks, and the public. A system of risk-related premiums would be much more visible than most forms of implicit pricing. Banks would be able to observe directly the price of moving to riskier positions (as defined by the regulator) and it is likely that the formula used to derive risk-related premiums would have to be made publicly available. Because of the directly observable costs, banks may be more likely to scrutinize the formulas used to calculate premiums than they scrutinize the current set of implicit premiums. Moreover, a system of risk-related premiums would provide banks, analysts, and the public with information more suitable for making interbank comparisons of risk. It would be relatively easy for analysts or the media to construct a list of the FDIC's riskiest banks.

There are positive and negative aspects to the increased private and public scrutiny that may accompany explicit pricing. In the short run, the adverse publicity associated with being designated a high-risk bank may create liquidity problems and, therefore, may hinder the recovery of potentially

viable banks. However, in the long run, the potential for this adverse publicity may increase the deterrent effect of risk-related premiums. This may be particularly important if the financial penalties associated with risk-related premiums are relatively small (initially, this is apt to be the case).

The increased visibility of risk-related premiums also may have a positive effect on the insurer's incentives to correctly assess risks in banking. With an explicit pricing formula, banks and the public would periodically question its appropriateness. While the insurer may be uncomfortable with this increased scrutiny, it would force regulators to continually rethink and revise their risk-monitoring system.

Pricing by Ex Ante or Ex Post Measures of Risk

Obtaining accurate ex ante measures of bank risk is perhaps more difficult than in many other areas of insurance. In an ex ante sense, the insured nearly always has better information about the potential risk he or she faces than does the insurer. In the case of commercial banks, assessing financial risks of lending to idiosyncratic borrowers is a central function of the enterprise. As a result of this specialized knowledge, the ex ante information gap between the insured and insurer is perhaps larger than in most other insurance settings.

This large informational asymmetry between the insured and insurer is perhaps one of the reasons for the inability of researchers to find good ex

ante measures of risk. Although there are steps that the insurer could take to increase the amount of information concerning the inherent risks of specific institutions (such as becoming intimately familiar with an institution's credits), the costs of acquiring this information may well be prohibitive. Thus, most analyses have concluded that any workable system of risk-related premiums would be restricted to one based on ex post measures of risk (e.g., see Avery, Hanweck, and Kwast (1985); Merrick and Saunders (1985), p. 707).

There have been two major criticisms of basing risk-related premiums on ex post measures of risk. First, it is argued that if risk is recognized by a premium system only after it results in loss, then the premium structure has not served its purpose of inhibiting risk-taking (Horvitz (1983b), p. 259). For example, if higher premiums had been assessed against LDC debt after it became obvious that such loans were problematic, the higher premiums would not have inhibited such lending because banks had already recognized the error of their ways (i.e., they were no longer making new loans to LDC countries). While this argument is true, it does not recognize the more general deterrent that "after-the-fact" penalties may provide. That is, if bank managers know that increases in nonperforming loans will result in higher insurance premiums, managers will generally take greater care in assessing and pricing risk. In private insurance markets, basing premiums on ex post measures of risk, such as traffic violations or accidents, is not uncommon.

The second criticism of ex post measures of risk is that they will penalize banks when they can least afford it, i.e., when they have encountered difficulty. In addition, credit quality typically declines during the

downturn of the business cycle. Increasing premiums during a recession could further aggravate banking problems (Goodman & Shaffer (1984), p. 154), even though loan-quality problems necessarily would not be the result of poor management decisions.³¹ This is clearly a concern and underscores the point that any ex post system must balance the need to impose penalties sufficiently large to deter undesired behavior against the possibility that excessive penalties may aggravate cyclical banking conditions. (Most types of private insurance are not faced with this same kind of systemic problem and, therefore, premiums based on ex post measures of risk would not present similar kinds of problems.)

The most recent FDIC proposal for risk-related premiums would double the current flat-rate premium of one-twelfth of one percent of total domestic deposits for normal-risk banks to one-sixth of one percent for the high-risk group. Assuming that banks fund 80 percent of their assets with domestic deposits, as a percent of assets this translates into about 6.5 basis points for normal-risk banks and about 13 basis points for high-risk banks. This 6.5 basis point differential between high-risk and normal-risk banks is equal to about two percent of an average bank's noninterest expenses (or equal to about one percent of its interest expenses given current interest rates) or about six to ten percent of a healthy bank's return on assets.

In contrast, a risk premium that fully compensated the FDIC for the increased cost of high-risk banks would be much greater than 6.5 basis points. For example, experience suggests that about ten percent of the banks on the problem bank list will fail in any given year.³² If a problem bank has a one in ten chance of failing and the FDIC's cost of resolving the

failure is equal to, for example, 15 percent of failed-bank assets, then an insurance premium on high-risk banks adequate to cover their expected cost to the FDIC would be equal to 150 basis points. (The probability of failure, 0.1, multiplied by the loss on failed-bank assets, 0.15, equals 0.015 or 150 basis points.) Assuming that the current premium (roughly 6.5 basis points of total assets) is more than sufficient to cover the expected costs of normal-risk banks, the premium for a group of banks the size of the problem bank list could easily range from 100 to 200 basis points above that charged to normal-risk banks.

This rough estimation suggests that the premium differential between normal-risk and high-risk banks (6.5 basis points) as envisioned by the FDIC's latest proposal would be considerably less than that needed to fully compensate for the difference in expected costs. Moreover, the premium differential represents a rather small component of total bank expenses. Thus, there is a legitimate question concerning the extent to which the premium differential is sufficient to deter risky behavior.

Despite this question, our inability to measure risk before it materially affects the performance of the bank places substantial constraints on the size of the penalty that realistically could be levied against a high-risk bank. If risk can be detected before a bank's performance has deteriorated, a relatively heavy penalty can be levied that may alter its behavior without jeopardizing its existence. Levying a 100 basis point penalty against a bank that is already performing poorly, however, would probably ensure its eventual failure. While this may be appropriate in some cases, there are other cases where it would not be appropriate, i.e., most

banks on the problem bank list eventually recover. This limitation and the fact that the FDIC is a public monopolist (banks cannot choose another insurer) argue in favor of a relatively modest risk penalty.

Conclusions

Currently, it is not feasible to construct a pricing system totally based on market information. The option pricing framework is a promising approach, but there appear to be formidable problems with its implementation. Further investigation is needed to assess its feasibility.

If market prices are not to be used, it should be recognized that implementing a risk-related pricing system does not eliminate government regulation in banking; it simply replaces one form of regulation, the current set of implicit prices (supervision and regulation), with another form of regulation, an explicit set of prices. In either case, it will be the federal regulator, not the market, who will set the standards.

As was stated earlier, there are some advantages in moving to a more explicit pricing system. First, an increased reliance on explicit pricing would give banks greater flexibility in meeting federal standards. Banks that fall below some or all of the standards would have more options in dealing with their difficulty, and they would be able to choose the most efficient option given their unique economic environment. Second, adopting risk-related premiums would force regulators to be more explicit in defining desirable and undesirable behavior for commercial banks. This increased visibility would

provide greater incentives for regulators to reassess existing industry risks and to detect emerging risks. From the banks' perspective, explicit pricing may reduce some of the uncertainty associated with other forms of supervision and regulation. This reduced uncertainty regarding rules and penalties should increase the deterrent effect of the pricing system, since banks will know more precisely what behavior is desired and the penalties for failing to meet those standards.

Despite these operational advantages, a major question is whether a pricing formula or rule could be established that would, to some extent, substitute for the current discretionary sanctions that are imposed through the examination process. In our opinion, the ability to establish such a formula is limited at this time. Under the current system, examiners are able to use judgment in identifying risky situations and are able to tailor solutions to meet unique circumstances. If a problem is identified, practices and activities deemed to be the source of the problem can be proscribed directly and the bank can be monitored for noncompliance. It would be extremely difficult to construct a pricing formula that could anticipate many of these situations.³³

But it is feasible to establish a general pricing rule that would complement, rather than supplant, the current set of implicit pricing tools. This pricing formula likely would be based on ex post measures of risk (i.e., earnings, problem loans, capital, etc.), and premium differentials at first probably would be relatively modest.

Even to the extent that this type of pricing rule could substitute for some of the current sanctions that are utilized, the monitoring of banks to ensure accurate reporting and compliance still would be necessary. It is doubtful that such a system, as now envisaged, would allow us to significantly reduce our reliance on the supervisory tools that are now used. The major advantages of adopting an explicit pricing rule, given our view of its limitations, are that its greater visibility would force regulators to be more cognizant of existing and emerging risks, and that greater certainty concerning what constitutes undesirable behavior and the resulting penalties may result in greater deterrence.

Given the current state of knowledge, we believe a risk-related pricing system should have the following characteristics:

- o Because our ability to determine risks ex ante is very limited at this time, risk-related premiums would have to be based on ex post measures of risk, such as earnings, capital, nonperforming loans, and loan charge-offs. If better ex ante measures of risk eventually were developed, or if option pricing techniques proved useful in setting premiums for larger institutions, these always could be incorporated into the system later.
- o Risk factors used in a risk-related system should be related to risk in a clear and understandable way.
- o Initially, the premium differential between a low-risk and high-risk bank should be modest. In other words, the

penalty for being classified a high-risk bank should not be so onerous as to jeopardize the bank's existence, unless the bank already is in jeopardy of failing. In all likelihood, this will mean that the premium structure will not be actuarially fair, in the sense that high-risk banks will not be paying premiums equal to their expected cost to the fund. Upon gaining more knowledge concerning the fairness of the system, premium differentials could be widened to more accurately reflect expected costs.

- o It may be appropriate to include an adjustment factor that would reduce the premium differential between low-risk and high-risk banks during economic downturns.

- o Because banks do not have the option to choose an alternative insurer, a risk-based system should be structured such that banks are given the benefit of the doubt. A mechanism for challenging risk classifications should be made available to banks.

In 1986, the FDIC developed a proposal for a system of risk-related premiums (Hirschhorn (1986)) that we believe satisfies these criteria. We are not under the illusion that this type of proposal will solve the moral hazard problem associated with deposit insurance; we acknowledge that it will not. But we do believe that it will create some modest incentives for banks to behave more prudently and will allocate the costs of deposit insurance more equitably than the current system.

FOOTNOTES

¹After deducting operating expenses and insurance losses from gross assessment income, 60 percent of the remainder may be rebated to insured commercial banks in the form of a credit applied to the following year's assessment. Further, the Board of Directors may adjust the credit if the insurance fund drops below 1.25 percent of insured deposits and is required to adjust the credit if the fund drops below 1.10 percent or rises above 1.40 percent of insured deposits.

²Merrick and Saunders (1985), p. 704.

³Technically, whether or not bankers will move to a riskier position depends on their attitudes toward risk-taking. The introduction of flat-rate pricing reduces the cost of assuming more risk. This price change has the effect of inducing banks to assume more risk. This is referred to as the "substitution effect." However, the price change also creates a wealth effect: banks can earn higher returns at any given level of risk. This increased wealth or income may make some bank managers less willing to accept more risk, even though the price of accepting more risk has been reduced. If this "income effect" dominates, bank managers actually may choose a less risky position. However, most economists believe that the "substitution effect" will dominate over the "income effect."

⁴The perverse incentives toward risk-taking associated with a flat-rate system will exist regardless of the level of the premium.

⁵Whether or not the current system of implicit premiums appropriately prices risk, or assesses risk in an ex ante sense, is an open question. The point is that regulation and supervision represent a cost of obtaining insurance and, to some degree, constrain risk-taking.

⁶If there are third-party costs, i.e., externalities, then the optimal premium should exceed the premium that would be set in a private market.

⁷In addition to credit risk, banking risks also include interest-rate risk, malfeasance, liquidity risk, and operating risks. However, credit risk and malfeasance are the two forms of risk that have been most responsible for banking difficulties and, yet, are the most difficult to detect.

⁸It should be noted that the difficulties that these information problems present for designing an efficient risk-related pricing system apply equally to a system of explicit or implicit premiums, including the current system of implicit premiums.

⁹Merrick and Saunders (1985) note that, where asymmetric information exists, single-class insurance systems usually fail due to adverse selection. That is, low-risk types elect not to take insurance and, therefore, the insurer is left with only the high-risk clients. They note that, given the FDIC's single-class insurance system, it is puzzling why almost all banks have

⁹ cont-elected to take insurance. Of course, nearly all chartering authorities now require banks to have federal insurance. However, during earlier periods this was not the case and nearly all banks that had the option to choose elected to purchase insurance. They speculate that either insurance is underpriced so as to induce all banks to take insurance or that implicit pricing--capital standards, surveillance, etc.--has been effective in constraining banks so they exhibit relatively homogeneous risk characteristics. However, another explanation is that deposit insurance confers a large benefit on the insured by eliminating the threat of runs. Moreover, there is no need to charge for this benefit because the marginal cost of producing it is zero. The FDIC only needs to charge for the normal kinds of portfolio risks that occur in a no-run environment.

¹⁰The term incentive-compatible simply means that there are incentives for the insured to choose the premium/attribute combination that is appropriate for its risk class.

¹¹The problem here is similar to knowing whether the long-run revenues under the current pricing scheme are adequate to handle the long-run costs. Because of the systemic nature of bank failures, even 55 years of experience cannot tell us with much certainty whether the rate at which the fund is being accumulated is sufficient to meet long-run costs.

¹²Some sort of ex post settling-up or extended liability schemes could be termed incentive-compatible as well. These schemes would expose stockholders and management to more of the downside risk associated with alternative investment strategies and their implementation would not depend on accurate actuarial information. However, since these types of contracts do not involve the self-selection of banks into different risk categories, they are discussed below as a method for dealing with moral hazard.

¹³In order for such schemes to work, banks would have to post bonds or put money into escrow accounts to ensure that the penalty could be imposed. As is pointed out later, this would impose an additional cost on both high-risk and low-risk banks.

¹⁴With private insurance, depositors still would need to monitor the health of the private insurer. Thus, even in the absence of the systemic-risk problem, private insurance would generate a new set of adverse selection/moral hazard problems.

¹⁵Also, deposit insurance assessments under a private system will not reflect the external costs of bank failure. Market-based pricing of deposit insurance will not be efficient if external costs and public-policy concerns are not taken into consideration.

¹⁶Perhaps another way of viewing this same question is whether the private insurer with a 100 percent reserve requirement would have the same production costs as the federal insurer who does not face the same restriction. With different costs of production, the prices charged by private insurers may not be appropriate for the federal insurer.

¹⁷Baer also questions the usefulness of subordinated debt as a pricing tool. Because the subordinated debt holder is exposed to a different loss curve than is the insurer, the risk premium on their exposure is different than that required by the insurer. Therefore, subordinated debt cannot be used directly to price the insurance premium.

¹⁸In addition, some sophisticated (and uninsured) depositors may feel that they always will have sufficient warning to withdraw their funds prior to failure. If so, risk premiums on these deposits may not be appropriate for setting insurance premiums.

¹⁹The opposite of a put option is a call option, which gives the owner the right to buy an asset at a specified price on some future date.

²⁰The concept of deposit insurance as a put option could be broadened to include the "right" of the owner to transfer all liabilities to the insurer in the event of an insolvency or a failure. This interpretation may be more reflective of current failure policies of the insurer.

²¹It is interesting to note that the lifetime of the put option might be an important control factor in pricing deposit insurance. For example, riskier banks could be examined and assessed deposit insurance more frequently.

²²One example of the use of CAPM in conjunction with an option pricing framework is Brickley and James (1986). By assuming a market portfolio of eight percent GNMA certificates, the authors fit a CAPM for publicly traded S&Ls, whose major assets are held as mortgages. Their model's estimates of beta could, in turn, allow the model to be applied to nonpublic S&Ls.

²³If it does not appropriately weight credit risk, then the weighting scheme will result in a misallocation of credit.

²⁴In other words, the allocation of credit is already affected by the existence of a regulatory capital requirement. Because the current guidelines require banks to hold the same amount of capital for a risky loan as for a risk-free Treasury security, and require no capital for off-balance-sheet items, bank investment behavior is altered from what it would be if banks faced no regulatory requirement, i.e., the market determined the appropriate capital level. Thus, the question is whether the new guidelines result in fewer distortions than the existing system.

²⁵If premiums were based on examination ratings, it would be desirable to examine banks at least once a year. The FDIC now is moving in that direction.

²⁶Failure-prediction models can be used for several purposes. Many failure-prediction or problem-bank identification models have been designed primarily as early-warning systems. Early-warning systems assist regulators in identifying potential problems and in better allocating supervisory resources to deal with these problems. Some failure-prediction models also have been designed for the purpose of identifying the causes of past failures,

²⁶cont. rather than for predicting future behavior (Pantalone and Platt (1987)). Relatively few of these models have been used in a specific risk-related premium proposal. While all of these models may provide useful information for the design of a risk-related pricing scheme, a particular model's applicability will be limited by its intended purpose. Generally speaking, in designing a model for the purpose of setting insurance premiums (versus an early-warning system) one must take greater care to ensure that there is a stable underlying relationship between a particular financial variable and bank risk.

²⁷Once the parameters of the failure-prediction model have been estimated using historical data, the number of institutions that will be designated as high risk can be varied by simply changing the probability of failure threshold. The threshold level is the dividing line between what would be considered a high-risk bank (or alternatively a potential failure or a problem bank) and a low-risk bank. By lowering the threshold level one can increase the number of actual failures that are designated as high risk, but only at the cost of designating more nonfailures as high risk. In the extreme, one could correctly predict all failures by simply classifying all banks as high risk, but this would defeat the purpose of the model. In the case of the model used in the FDIC's proposal, the ability to correctly classify actual failures was achieved at a cost of rating 20 percent of all banks as high risk.

²⁸Another factor limiting the accuracy of these estimates is the fact that not all banks report accurate Call Report data. Examinations often reveal that banks have underestimated the true extent of their problems. Perhaps assessing banks penalties when examinations reveal that they have underreported problems would partially solve this problem.

²⁹Of course, this will vary from bank to bank. Some banks, particularly large banks, may make a considerable amount of loans to corporate borrowers for which markets generally possess a considerable amount of information; or some banks may have portfolios that are weighted more heavily with marketable securities or loans that are more easily evaluated by markets, such as mortgages.

³⁰Of course, if there are externalities or third-party effects that result from bank failures, then the market would underprice risk. But this is another kind of inefficiency than the one being discussed here. With the existence of credible insurance, third-party effects are apt to be small.

³¹Under the current rebate system it is likely that effective premiums also will rise during recessionary periods. However, with the current system the burden of higher premiums is shared evenly by all banks.

³²This group is roughly equivalent to the group that would be designated as high-risk banks in a previous FDIC proposal.

³³Of course, through the examination process, pecuniary penalties could be assessed so as to bring about the same results as issuing cease-and-desist orders. But there would be little gain from doing this; no resources would be saved and the end result would be the same.

Chapter 4

MARKET MECHANISMS FOR CONTROLLING RISK

Market mechanisms for controlling risk are considered under four broad categories: insurance coverage (depositor discipline), information disclosure, capital standards, and the priority of creditor claims (depositor preference and nondepositor discipline). In all cases, there are costs and benefits associated with expanding the role of market-determined ("private") incentives. Whether the benefits are judged to exceed the costs in any given instance depends upon one's particular view of banks' unique economic functions and the perceived effectiveness of available alternatives to market-based arrangements.

Market discipline--the presence of market-determined incentives to control risk-taking--has many dimensions in banking. At the bank level, the potential sources of discipline include depositors, shareholders, managers, subordinated debt holders, and other nondeposit creditors. The bank holding company also is a potentially important source of discipline for the bank. Holding company shareholders and creditors have wealth at stake and, hence, have incentives to constrain the bank's actions. This chapter focuses on discipline at the bank level; however, any complete picture of market discipline in banking must consider the role of holding company creditors and

the incentive effects created by alternative failure-resolution methods (see Chapter 7).

As indicated in Chapter 2 ("Framework for Analyzing Deposit Insurance Reform"), it is the asymmetric information associated with bank assets (and the combination of these assets with callable liabilities) that makes exclusive reliance on market discipline--particularly depositor discipline--potentially problematic. Ideally, the market restrains risk-taking by imposing premiums (or, when necessary, covenants in loan contracts) that raise a bank's cost of funds commensurately with the assumed risk. In reality, the asymmetric information problem is a potential impediment to accurate pricing (or complete contract-writing) and, hence, to reliable discipline via market mechanisms alone.

Technically, the ideal goal of deposit insurance is to eliminate that portion of the market-determined risk premium reflecting the threat of bank runs without altering the portion reflecting other risks. This achievement would retain all the market discipline exercised in the absence of deposit insurance, but without the social costs posed by bank runs (Chapter 2). Moreover, in this ideal deposit insurance system, there would be no over-restriction of risk-taking through market mechanisms, i.e., market devices would not be used to impose artificially-restrictive constraints, as these unnecessarily raise the social costs of intermediation.¹ The nature of bank assets makes it difficult to determine when the optimum has been reached, since the need for specialized information makes market assessments of bank risk (and, hence, asset-value determinations) costly, complex, and subject to error.

With these caveats and considerations as a backdrop, the remainder of this chapter explores potential sources of additional market discipline at the bank level. The focus in each case is on developing appropriate criteria with which to decide whether additional market mechanisms are warranted. The case of depositor discipline is examined first, as it raises issues pertinent to all other sources of discipline considered in the chapter.

Insurance Coverage and Depositor Discipline

Statutory Limits

Given broad agreement that the present coverage limit is adequate to provide a safe haven for small savers' funds, and given no realistic legislative prospect of a rollback large enough to threaten the adequacy of the statutory limit for this purpose, the issue of the proper coverage level turns largely on the matter of financial stability.² In determining the proper statutory limit for insurance coverage, policymakers face a trade-off between two potential sources of financial instability: bank runs, which may be contagious, and excessive risk-taking by banks. While insurance coverage enhances stability in well-known ways, it simultaneously weakens two potential sources of incentives to limit bank risk-taking: the threat of runs and the demands of depositors for higher yields from riskier banks. The terms of the trade-off between bank runs and risk-taking are determined by the likelihood of runs and the magnitude of the threat they pose, as well as the comparative

effectiveness of depositor discipline and its substitutes under deposit insurance. These are considered in turn.

Runs by uninsured depositors remain a real possibility today whenever a bank is widely perceived to be imperilled. Runs have occurred at large banks despite apparently broad recognition of a de facto 100 percent guarantee of their deposit liabilities.³ This may suggest that large-depositors' potential costs in an insolvency proceeding remain sufficiently high under full insurance to cause withdrawals; or it may indicate that, at the time a large bank develops problems, the market perceives the FDIC's guarantee of large deposits as "conjectural" (Flannery (1986)) rather than de facto 100 percent. Some have interpreted the finding of differential risk premiums for large CDs as supportive of the latter explanation (Macey and Garrett (1988)), though the evidence is mixed (James (1988); Hannan and Hanweck (1988)). Regardless, it is apparent that currently a real threat of runs remains.

At the same time, it is important to note that today's bank runs are confined to institutions that are insolvent, or virtually so. So-called "pure panic" runs by depositors, which are not based on any determination of the bank's longer-run viability, are not observed in the current setting. Thus, while present arrangements clearly do not foreclose the possibility of bank runs based on false information or occurrences unrelated to a bank's true condition, the empirical evidence suggests little to fear for institutions that avoid real financial difficulty (Kaufman (1988)).

The policy question is whether the trade-off represented by the present statutory limit is optimal. Difficulties arise in weighing the costs and

benefits associated with changes in coverage in either direction. In the direction of lower coverage, for example, perceptions of the costs associated with nonsystemic bank runs differ. The costs associated with isolated runs as well as the probability of contagion are hard to measure objectively, despite rich historical experience. For similar reasons, there are differing views on the historical reliability of depositor discipline. This suggests that historical reexaminations of pre-FDIC bank runs and depositor discipline are of limited value for the current policy decision concerning statutory coverage.⁴

The different perspectives through which history is filtered lead to different interpretations of the facts for the purposes of present-day policymaking.⁵ Some view the pre-insurance era as a healthy one for banking, on balance, and advocate more reliance on the market, i.e., on the threat of runs and depositor discipline (Kaufman (1988); Schwartz (1987)). Others see the period as excessively unstable due to the frequency and high economic cost of bank runs (based on evidence such as Bernanke's (1983) or Tallman's (1988)). These different perspectives do not reflect disputes over the factual consequences of bank runs and depositor discipline, so much as differing implicit judgments about the relative cost and viability of the alternatives (namely, constraints on risk-taking applied by nondepositors).

Such implicit judgments, and not the historical "facts," are most properly the focus of the policy debate. The crucial question is not whether the facts prove that historical (more market-oriented) arrangements were good or bad, it is whether some level of deposit insurance coverage represents a viable, long-run alternative to these arrangements that is clearly better.

Thus, a fundamental issue is how this judgment should be made.⁶ Two perspectives merit consideration.

First, the recognition of banks as "special" intermediaries creates a predisposition to avoiding bank runs, as noted in Chapter 2. Runs impose the very costs (of spot-market valuation) that banking serves to avoid. They interrupt transformation services directly, while the threat of runs causes bankers to underproduce liquidity, thereby precluding the realization of aggregate economic potential. In effect, runs nullify banking's unique contribution to economic activity. It follows that any form of depositor discipline creating a susceptibility to bank runs is to be avoided, absent convincing evidence that reliance on alternative (nondeposit) risk controls is potentially more costly than bank runs. According to this view, there is "a much stronger case" for 100 percent coverage than for any reduction in the statutory limit (Diamond and Dybvig (1986)).

An alternative perspective on bank uniqueness regards the cost of bank runs as the short-run price that necessarily must be paid for long-run stability.⁷ The crucial judgment here takes one of two forms: (1) the containment of bank risk-taking is technically infeasible without greater reliance on depositor discipline, due to inadequacies in available analytical tools or logistical impossibilities; or (2) without substantial depositor discipline, deposit insurance necessitates reliance on forms of risk control that are self-defeating in the long run, due to incentive problems created both by insurance coverage and institutional arrangements in public bureaucracies. The first type of argument appears to be contradicted by FDIC supervisory experience (Chapter 5) and by other types of evidence presented

elsewhere in the Study (particularly Chapters 3 and 5). Thus, only the second type of argument is examined here.

Incentives are distorted by insurance coverage such that deposits tend to flow away from the most conservatively managed institutions toward the most risky. This occurs because insured depositors can obtain higher yields (implicit or explicit) from the latter with no added risk. When coverage is extensive, the insurer's supervision becomes essential to preventing (an increasing) overexposure to risk in the industry. According to this perspective, such supervision is unlikely to be successful without the aid of depositor discipline (to signal difficulties). The reason is that the economic incentives inherent in this supervisory arrangement work against the containment of banking risk. Allegedly, bankers have stronger economic incentives to innovate around constraints than the insurer has to prevent this. The reason is that bankers' wealth is more directly at stake in the outcome than is the wealth of deposit-insurer employees and management.⁸ Combined with the fact that incentives favor the placement of insured deposits with the most daring bankers, this suggests that excessive reliance on insurance coverage poses a long-run threat to the stability (and efficiency) of the banking industry.⁹

The unique economic value of liquidity transformation may be used as an argument for higher levels—of statutory coverage, while the "depositor discipline" approach may be used to suggest the opposite (Diamond and Dybvig (1986); Kane (1986a)). Neither argument can be completely convincing, because each considers only one side of the trade-off between bank runs and bank risk-taking. The first presents a strong theoretical case against bank runs

as a form of discipline, but fails to establish convincingly that there exist feasible real-world alternatives to bank runs that are better (less costly). The "depositor discipline" argument makes a plausible case that some threat of bank runs is a necessary evil, but fails to establish convincingly that reliance on nondeposit sources of discipline poses greater economic risks than does the threat of runs.¹⁰

Neither approach can "prove" its case, because the relative magnitudes of the alternative costs, as well as the probabilities of incurring them, are not objectively measurable. Both approaches also ignore empirical realities that weaken the support for their implications. Most notably, the uniqueness (or "special intermediary") argument fails to consider that present coverage has been sufficient to eliminate runs on healthy institutions. Given this reality, it is difficult to argue that the threat of runs currently presents an obstacle to liquidity transformation, and thus it is difficult to conclude that there is much to be gained by increasing coverage.^{11,12} Similarly for the depositor discipline argument, it is not at all clear that depositor discipline is somehow insufficient. Thus, in light of the potential costs cited in the uniqueness paradigm, it is not evident that lower coverage would produce net economic benefits.

Nonetheless, there are no obvious analytical errors or inconsistencies to serve as a basis for neglecting the implications of either approach; nor is it necessary to choose between them. Both are plausible, and if the coverage issue is viewed as a mutually exclusive selection between these views, then there can be no clear choice, no credibly "coherent" policy strategy (see footnote 6). Given our current understanding, the reality is

that any selection of a coverage limit must be uncomfortably arbitrary and, for any amount of coverage greater than zero but less than 100 percent, there will be an unavoidable risk (of uncertain proportions) that neither bank runs nor bank risk-taking is sufficiently contained to preserve stability.¹³ A more reasoned response is to acknowledge these uncertainties and adopt an approach aimed at minimizing the potential costs associated with them.

Since it is unclear that any change in the dollar amount of coverage would yield a more favorable trade-off than that implied by the present limit, it seems reasonable to seek alternative means of dealing with the respective risks. In other words, since both approaches identify potential costs that cannot reasonably be ignored, yet neither removes enough uncertainty about these costs to indicate precisely how they should be traded off via the coverage limit, an appropriate alternative approach might be to lower the stakes of the trade-off through measures that limit the potential magnitude of both types of costs. Remaining sections of this chapter consider several market-based policy options that may be consistent with this goal.¹⁴

To summarize, selection of a statutory insurance limit poses a trade-off between two potential sources of financial instability: bank runs and bank risk-taking. The direction in which coverage should be altered, if any, depends upon which of the alternative risks is greater. This determination calls for a cost comparison, but measurements conflict for even the most "objective" components of the relevant costs, and the largest components are inherently subjective, therefore immeasurable.¹⁵ Hence, proposed rankings of the relative risks necessarily reflect the subjective emphasis of a particular analytical approach more than any detached weighing

of empirical data. Neglecting either of the potential risks may produce financial instability of one type, yet attempting to balance the two risks by selecting a particular trade-off will not guarantee financial stability of either type. This suggests that policies aimed at improving the terms of the trade-off (limiting the potential costs associated with both types of risks) may be most productive. Market-based policy options of this variety are considered below.

Deposit Size versus Deposit Maturity

The terms of the trade-off between bank runs and bank risk-taking might be altered favorably by insuring deposits on the basis of maturity rather than size. Conceptually, maturity-based deposit insurance has distinct advantages over the current system. Short-term deposits, particularly transactions deposits that are made available on demand, are the primary source of bank runs.¹⁶ Restricting insurance coverage to short-term ("runnable") deposits, regardless of size, is clearly consistent with the primary objective of deposit insurance--to avoid the costs of bank runs without inducing excessive risk-taking--and appears to have a clearer rationale on this basis than does coverage based on deposit size. That is, while the threat posed by instantly callable deposits is well established, there appears to be no such connection between the size of deposit accounts and the probability (or social cost) of bank runs (Furlong (1984)).

Moreover, coverage based on maturity could, in principle, eliminate bank runs without the complete sacrifice of depositor discipline entailed by

100 percent coverage; the latter being the only available option for eliminating runs (with certainty) when coverage is based on deposit size. Longer-term deposits would be at risk under a maturity-based system, thus preserving some incentive for monitoring by depositors.

Despite its conceptual appeal, maturity-based insurance coverage would entail transition costs and implementation problems that presently appear prohibitive. The initial problem arises in selecting the appropriate definition of a "short"-maturity deposit. It is clear that the maximum maturity deemed eligible for coverage should allow sufficient time for determining the financial condition of the bank, and thus the definition might reflect the frequency of bank examinations (Furlong (1984)). Beyond this minimal constraint there is little to guide the decision, since the degree of "runnability" of different maturities is not obvious and probably would not be uniform across deposits of the same maturity, given the different conceivable terms for withdrawal. The final selection of a maturity limit could not be significantly less arbitrary than the current dollar limit based on deposit size.

Switching to a maturity-based insurance system also would affect the maturity structure of bank deposits, as more funds could be expected to flow to short-term accounts. This could encourage maturity mismatching to excessive degrees, thus making bank supervision more difficult. Although it is not clear that the supervisory task would be impossible under such a system, it is probable that a greater commitment of supervisory resources would be necessary. Of perhaps greater concern are the uncertain macroeconomic

consequences of providing an effective government subsidy to short-term accounts.

In any case, these added costs must be weighed against the potential benefits of such a switch, and it is not apparent that the gains would be large. Certainly, there could be no fewer runs on solvent institutions than presently, and the effectiveness of depositor discipline could not be greatly improved unless failure-resolution methods also were altered to remove existing de facto guarantees. Since the constraints on the FDIC's options for failure resolution are unlikely to change in the near future (Chapter 7), the depositor-discipline effect of any change in the basis for coverage is likely to be limited. Given the uncertainty surrounding the costs and the lack of a clear prospect for significant gains, it does not appear that any commitment to a maturity-based system could be justified at this time.

One-Hundred-Percent Coverage

The statutory coverage limit is indicative of the prevailing balance between run prevention and depositor discipline only in the absence of implicit types of coverage for depositors. Recognizing this, some have concluded that the FDIC's stated policy of resolving failures (the use of P&As "whenever possible") has effectively reduced depositor discipline to miniscule proportions and has weakened nondeposit sources of market discipline in the process. In other words, this view suggests that the real trade-off (of run prevention for depositor discipline) reflected in the current operation of the deposit insurance system is essentially a wholesale trade of all market

discipline (at the bank level) for virtually complete protection against runs on solvent institutions, despite appearances created by the statutory limit.¹⁷

This type of argument typically leads to a conclusion that explicit, 100 percent coverage is appropriate.¹⁸ It suggests there is nothing to be lost in the way of depositor discipline, and there are several gains to be made.¹⁹ First, full coverage could result in somewhat greater stability than is now common, eliminating some uncertainty and perhaps providing an environment that would allow for a more orderly resolution of failures. Recalling that a major function of deposit insurance is to remove the economic inefficiency associated with the threat of runs, full coverage does this most certainly and completely. Second, it would produce a more equitable system in the sense that large depositors would be treated equally regardless of the circumstances surrounding a bank failure, and small banks could compete for large deposits on more equal footing with big banks. Third, although full coverage would possibly reduce depositor discipline, it could increase market discipline overall (say, if deposit transfers were to replace P&As as the primary method of failure resolution--see Chapter 7 on this point). Finally, full coverage would not change the FDIC's failure-resolution costs appreciably under current methods of handling failures and, with minor changes in failure-resolution procedures under a full-coverage scheme, the fund's risk exposure could probably be reduced. (Again, see Chapter 7 for details, as well as Silverberg (1988)).

The major difficulty with this argument is the assumption that depositor discipline is completely absent from the current environment. While

the evidence is mixed, some recent studies contradict this, suggesting that CD markets are fairly sensitive to bank-specific risk and act as a constraint on banks wishing to pursue riskier positions.²⁰ This constraint may be necessary for control of bank risk-taking in a deposit insurance environment, given the artificial incentives to incur risk.

Even in the absence of this evidence, however, it may be argued that another aspect of depositor discipline--the inevitable flight of uninsured funds from troubled institutions (footnote 3)--provides some net benefits to the system. First, though after-the-fact discipline may come too late to help the affected institution, it still may act as a deterrent to other banks pursuing similarly risky positions. Second, the after-the-fact flight of funds from floundering institutions may alert supervisors to problems that deserve closer attention or to institutions that require closing. Absent such runs, troubled institutions may go unnoticed for some time, thereby increasing eventual losses to the insurance fund. Finally, such liquidity pressures may force chartering authorities to deal with problems (in the form of bank closings) they might otherwise be reluctant to address. In effect, uninsured depositors may act as a check on regulators, forcing them to deal with problems after the problems are identified.

These considerations suggest that, despite a standing failure-resolution policy that effectively promises full coverage whenever possible, there remains some valuable depositor discipline in banking. Thus, the proposal for 100 percent coverage may amount to a trade-off of discipline for little, if any, added protection against damaging runs.²¹ To the extent that P&As become feasible for a larger proportion of failure resolutions in

the future, depositor discipline may weaken and the case for full coverage may appear stronger. At this time, however, the complete removal of deposit exposure presents excessively uncertain, and potentially hazardous, implications for the control of bank risk-taking.²²

Limits on Brokered-Deposit Coverage

It often is suggested that market incentives for controlling risk are unnecessarily weakened with the nearly limitless extension of insurance coverage made possible by deposit brokerage. Weak institutions always can obtain funding by offering a small premium above insured-deposit rates because brokers package deposits into hundred-thousand-dollar bundles for sale to the highest bidder. Depositors can use brokers to economically achieve complete insurance protection (\$100,000, times the number of insurable accounts per institution, times the number of insured institutions), and this ability allows risk-taking institutions to acquire funds for far less than the true market price of the assumed risk. One way to reharness market forces to control risk-taking would be to limit insurance coverage for brokered deposits. Another might be to restrict coverage to some maximum amount per individual rather than per account; and a third might be to limit the rates banks may pay for insured funds.²³

These proposals ignore FDIC examination experience, which suggests that supervision can, in general, effectively discriminate between sound and unsound uses of brokered funds (Harless (1984)). Moreover, recently proposed changes in reporting requirements should enhance examiners' ability to detect

brokered-deposit abuses early. Supervisors will get clear signals that closer scrutiny is warranted. These signals take the form of increases in offering rates and the growth of brokered-funds purchased. Once in the bank, supervisors can evaluate the quality of lending in the usual manner. This indicates that the brokerage of funds is not a special problem, but part of the more general incentive problem in deposit insurance.

Given the same incentive structure, the same allocation of funds would tend to result in a world without deposit brokerage, but it may evolve less quickly and less efficiently (this is examined below). If there is a control problem concerning the competition for and uses of brokered deposits, it reflects a more systemic influence (uncontained moral hazard) that calls for fundamental changes in the structure of deposit insurance. As noted earlier, the evidence does not warrant such a structural overhaul, but suggests that supervisory resources can monitor risky behavior--including brokered-funds activity--sufficiently to contain the exposure of the insurance fund.

The above proposals to curb brokered funding also assume that higher-than-market rates for insured deposits are reliable signals of excessively speculative lending by banks rather than reflections of sound lending opportunities with superior profit prospects. While it does appear that the size of the premium is positively related to the degree of speculation, this relationship is not uniform, and there is no indication that speculative uses of brokered funds predominate.

Deposit brokers perform a valuable economic function to the extent that they allocate funds to the banking system's highest-valued uses at a smaller

cost than could otherwise be achieved.²⁴ Thus, proposals that would alter insurance coverage in order to curtail abuses of insured-deposit brokerage may also reduce the efficiency of deposit allocation in the financial system. At the same time, such proposals threaten to increase instability, reduce total liquidity, and raise the costs of intermediation by placing more deposit funds at risk. Given the supervisory experience with brokered funds, it is not clear that the proposals to alter coverage offer a benefit of sufficient size to warrant the potential costs.

Similarly, the suggestion to cap rates payable for insured funds lacks any clear economic benefits. Proposed rate caps typically take the form of a limit (X number of basis points) above the Treasury bill rate, adjusted for the maturity of the deposit (Mussa (1986a)). This is often rationalized by noting that the government guarantee applied to insured deposits is virtually as firm as that carried by Treasury bills. Thus, there is presumably no economic reason, other than differences in liquidity and perhaps state-tax treatment of interest income, for insured-deposit rates to contain a significant premium.

This argument clearly has some merit, but if there are regional or other differences in lending prospects that warrant vigorous competition for funds, and if competition via pricing is most efficient, then there may be some economic justification for premiums beyond those noted in the argument. Regardless, the proper size of the premium is unknown, and thus, the allocative implications of a rate cap are uncertain. Moreover, experience with Regulation Q and other price controls suggests that these are among the easiest proscriptions to circumvent: numerous forms of nonprice competition

are available (and innovation certainly will create others), and fees to deposit suppliers may be substituted for higher yields. It is therefore not obvious that a rate cap would alter the outcome and, if it did, it is not obvious that this would be preferable to the outcome achievable via supervisory efforts.

In sum, brokered-deposit abuses represent one manifestation of the larger moral hazard problem inherent in the provision of deposit insurance. Proper monitoring systems and supervisory resources are necessary to contain any misuse of funds, but the evidence does not indicate that any broader structural reform is required. In particular, given the inherent costs associated with depositor discipline, there is little to suggest that brokered-funding activity warrants placing depositors at greater risk.

Disclosure

In general, market forces operate most effectively when participants are fully informed. Better-informed decisionmakers mean better decisions in the sense that the most productive behavior is duly rewarded and the least productive duly penalized. Many observers have used this principle to infer that market discipline in banking could be strengthened by requiring the disclosure of information indicating a bank's "true" financial condition. Interested parties currently have access to information provided in Call Reports and Uniform Bank Performance Reports as well as the bank's financial statements, but lack the results of bank examinations and insider knowledge that shape examination results. The main issue is whether examiner ratings

and the relevant information obtainable from onsite inspections should be disclosed in order to foster more effective market discipline.

There is a public-good element to the governmental collection and dissemination of such information, in that it reduces costly duplication of effort by other bank claimants and interested parties. In combination with the considerations mentioned above, this forms a strong argument in favor of greater disclosure. The proposed risk-related premium structure (Chapter 3) implies some additional disclosure of this type, as it would publicize one element of the process by which the FDIC assesses bank-portfolio risk. However, there are legitimate concerns regarding full disclosure of examination-related information, and these derive primarily from the complex nature of bank assets. Here the disclosure question strikes very close to the heart of banking's uniqueness.

Recalling the illiquid and idiosyncratic nature of many bank assets, it is evident that the valuation of such assets is costly and subject to large errors. (Indeed, this fact may help explain the prevalence of the demand deposit contract, with its fixed nominal value and instant availability. This removes the need for many depositors to invest heavily in monitoring and valuation (Goodhart (1987)). As noted earlier, the banking organization is (in part) a device for overcoming the inefficiency of a market arrangement for valuing these particular types of assets. The economic advantage of the banking form of organization derives precisely from its suitability for protecting against the inherent uncertainty in the value of such assets. There is some minimum degree of value uncertainty that cannot be reduced by

any known means (only the borrower, and then only sometimes, knows for sure), and the advantage of the banking form of organization is that it economizes as much as possible on the valuable resources that must be devoted to acquiring the attainable information.

This suggests there are limits to the benefits from any disclosure of the subjective types of information that are typically cited in the proposals. The disclosure of information in the form of raw data is different from the disclosure of a supervisor's assessment of value: Provided the incentive to misreport is controlled, the raw data is less likely to contain errors that are large or costly to the bank. Given the unavoidably variable error component in bank evaluations, their release may increase the incidence of errant bank runs (even while reducing the percentage of runs that are "errant"). It has been argued earlier that, even if based on sound information, a run is not the socially optimal response to any perceived banking problem. Thus it is questionable whether the release of insider information would be beneficial, on net.²⁵

Moreover, recent theoretical work has shown that if uninsured depositors always are forced to bear losses in a bank failure (and certain other plausible conditions hold) then banks may voluntarily choose to disclose information even though it may raise the possibility of bank runs (Pennacchi (1986)). If uninsured depositors feel that they will be able to withdraw their funds when the probability of default rises, then the bank may be able to lower its cost of funds by disclosing information. This suggests that a market-discipline approach to controlling risk--one that invariably imposes losses on uninsured depositors and permits disclosure at the bank's

discretion--may prompt behavioral responses that impose costs on the FDIC (Pennacchi (1986), p. 458).²⁶

In any event, a strong case can be made that most of the collectible, quantifiable information relevant to a value assessment is already available to the public. It would seem that those with sufficient economic incentive can and do use substantially the same information as the supervisor, and recent empirical evidence supports this view.²⁷ Moreover, it may be more important to preserve the quality of these commonly used data than to risk greater misreporting by publicizing the judgments of individual examiners. Disclosure of a supervisor's judgments may pose a significant threat to the integrity of the examination process if it creates stronger incentives for bankers to be less than forthcoming during an evaluation (Gilbert (1983); FDIC (1983)). While the same incentive to make things appear better than they truly are always operates at some level, disclosure of the raw data poses less risk to the bank, and the quality of these data is an important factor in the effectiveness of bank supervision.

Capital and Subordinated Debt

Market-based incentives to control risk-taking can be strengthened by requiring banks to hold more capital. The advent of interest-rate deregulation, heightened competition from nonbank-financial firms, and higher bank-failure rates have prompted many to recommend higher bank-capital requirements, both to provide incentives for safer lending and to serve as a protective cushion for the deposit insurance fund.

It has been suggested that higher capital standards impose little cost on banks, despite claims to the contrary by bank management, because financial markets are adequately efficient to ensure that the value of a firm does not depend on its leverage ratio (Horvitz (1988b)).²⁸ To the extent that debt still carries tax advantages that make it preferable to equity, capital requirements can be fulfilled with the use of subordinated debt. This offers the tax advantages of debt and serves the same function as capital in terms of risk control. It may even be superior in the sense that debt holders can lose as the result of a bank's speculative lending, but cannot share in the proceeds if a speculative venture pays off. Thus, holders of subordinated debt have particularly strong incentives to discourage speculation, according to this argument.

It is important to note at the outset that higher capital standards are not necessarily costless, either privately (to bank shareholders) or socially (in terms of an efficient allocation of investment funds). The theoretical conditions necessary for leverage to be irrelevant to the private value of the firm are exacting, and it is by no means clear that these are met in today's financial markets (Greenwald, Stiglitz, and Weiss (1984); Stiglitz (1985)). The differential tax treatments of debt and equity are not the sole reason for doubt. French (1988) has noted that the tax deductibility of subordinated debt does not neutralize the impact of higher capital requirements (in the form of subordinated debt) on firm value. Changing the composition of debt in favor of subordinated claims reduces the total cash flows available to the bank's uninsured, unsubordinated creditors in the event of failure, because the FDIC obtains a larger share of the proceeds from asset liquidations. This causes such creditors to demand higher yields, and thus reduces shareholders'

residual net income, i.e., reduces the value of shareholder claims.²⁹ Moreover, the recent empirical evidence of a leverage effect on the cost of funds is mixed (Santomero (1983); Furlong and Keeley (1987a); Shome, Smith, and Heggstead (1987)).

In the aggregate, where the social costs of higher capital requirements are relevant, an increase in the bank's cost of capital may reallocate risk-bearing funds away from nonbank production into banking (Santomero (1983); Santomero and Watson (1977); Wall (1985)). Given that risk capital is scarce in the manner of all economic goods, a requirement of greater capital in the banking sector may drive up the cost of funds to the real sector of the economy, and this may have consequences for investment spending and long-term productivity growth.³⁰ Combined with the potential effect of higher capital standards on private banking costs per se, this suggests that the decision on capital cannot safely be approached under the presumption that any cost consequences will be incidental.³¹

Given that higher capital requirements are likely to raise the cost of capital, the question is whether this increase is due to an implied reduction in deposit insurance subsidies or a reduction in leverage beyond what would be efficient in the absence of deposit insurance. The first reason for the increase is socially beneficial while the second is not. While it is impossible to say with certainty what would be the efficient leverage ratio for banks in the absence of deposit insurance, the merits of higher capital requirements may be evaluated for their suitability to the specific nature of the prevailing moral hazard "problem."³²

Chapters 2 and 3 suggest that moral hazard, properly understood in its present form, cannot necessarily be treated most effectively with a uniform increase in capital requirements.³³ It is not apparent that capital is presently too low to control risk-taking for the vast majority of commercial banks. Uneconomic risk-taking occurs primarily when capital is sufficiently impaired by loan losses to make speculation appear the optimal strategy. The breakdown in discipline occurs because the extent of the impairment is not accurately revealed to the market and to regulators in a timely fashion. Under this view, it is not so much that capital is somehow "too low" to begin with, rather it is an incentive problem that appears when proper reserving for losses would show significant capital impairment. This suggests that the most productive approach to the moral hazard problem may lie in the development of incentive-compatible schemes that elicit accurate revelation of losses from bankers.

Neither higher capital requirements nor expanded use of subordinated debt appear directly relevant to this goal. In particular, while subordinated debt clearly has attractive features as a risk-control device, its supposed advantages over capital are questionable. First, the interests of subordinated debt holders are likely to conflict with those of general creditors when the bank is in difficulty. While the debt holders may discourage risk-taking by requiring appropriate risk premiums at the time of issue, no such discipline is forthcoming after issue. Though debt holders share no part of the upside in any speculative ventures by the bank, it is clear that their interests become aligned with those of shareholders after debt issue, and most particularly when the bank's capital is impaired.³⁴

Though this concern may be mitigated somewhat by requiring banks to go to the market regularly (Horvitz (1987b and 1988a); Silverberg (1986)), it remains unclear whether subordinated debt offers any significant advantages over capital in restraining speculation by the most troubled institutions.

Second, recent empirical evidence raises some puzzling questions about the potential effectiveness of subordinated debt in controlling bank risk. A study of the one hundred largest bank holding companies (Avery, Belton, and Goldberg (1988)) found that risk premiums on subordinated debt were "virtually unrelated" to accounting measures of bank performance and to the FDIC's proposed risk-measurement index (for determining risk-related insurance premiums).³⁵ While the explanation for this result is unclear as yet, the estimates indicate that subordinated debt prices do not necessarily provide the kind of risk-control incentives desired by regulators. Until such results are satisfactorily explained or disproved, it would be premature to place greater reliance on subordinated debt as a disciplinary device.³⁶

Overall, it does not appear that circumstances warrant additional across-the-board capital requirements at this time. Strong capital positions and strict enforcement of capital standards are essential to a sound banking system, but an increase in the regulatory capital requirement entails real costs that must be weighed against the realistically achievable gains in risk control.

Additional Sources of Discipline

There are several additional classes of bank claimants that may have incentives to restrain the bank's risk-taking, depending upon their probable recoveries in the event of a failure. Chapter 7 ("Failure Resolution") identifies each of these classes and discusses the incentives posed by existing and alternative methods of handling bank failures. At this juncture, it is sufficient to generalize how market discipline may be introduced by altering the priority of claims in a bank liquidation. The example of depositor preference is considered below for this purpose.

Depositor Preference

In simple terms, depositor preference means that, in the event of bank failure, depositor claims have priority over those of other creditors. Depositors, in other words, would receive full payment of their claims before any liquidation proceeds were advanced to other creditors. Alternatively, in the absence of depositor preference, depositors and other general creditors would share the liquidation proceeds on a pro rata basis. At present, depositor preference laws, applicable to state-chartered banks, exist in some 23 states,³⁷ but no equivalent federal statutes exist for national banks.

The depositor preference provision is desirable for two main reasons: it could provide the FDIC a more efficient method for handling bank failures, with potentially lower losses to the fund, and it could remove implicit FDIC protection from certain bank creditors whose claims are not subject to FDIC

assessment. In the method presently used to resolve most bank failures, all claims of general creditors are ordinarily transferred in whole to the assuming bank, providing that no depositor preference exists (Chapter 7 offers details). This implies that depositors ordinarily receive the same level of protection as trade creditors, unsecured lenders, and other general creditors to the failed bank. In some bank failures the category of general creditors has eventually included claims involving third-party guarantees by the failed bank, such as letters of credit. Such claims may not have been evident at the time the bank was liquidated. Thus, without depositor preference, uninsured depositors as well as other general creditors--including potential claims arising from contingent liabilities of the bank--are accorded de facto FDIC insurance protection, even though deposits alone are subject to FDIC assessment.

With depositor preference, alternative methods of failure resolution become more feasible because depositors can legally receive preferred treatment over other creditors. For example, only deposits need be transferred to the purchaser of a failing bank, and the other so-called "general" creditors could receive subordinate status to depositors, thus being subject to losses on their claims. This possibility would provide the FDIC an extra degree of freedom in handling bank failures (thus FDIC costs could not be higher, provided that collateralized borrowing is assessed as described in Chapters 7 and 8). If necessary, such "deposit transfers" (or other methods discussed in Chapter 7) could be used to weaken the implicit guarantee on uninsured liabilities and thereby strengthen market discipline.

There are presently two compelling reservations regarding depositor preference. First, by placing nondepositors at the end of the line, depositor preference exposes them to greater risk than they would be forced to bear as creditors of firms outside the scope of deposit insurance. This may create competitive inequities and allocative distortions. Second, whatever benefits in the way of market discipline are gained through the greater risk to subordinated creditors could well be lost through the increased safety that uninsured depositors would realize under strict adherence to depositor preference (see section entitled, "One-Hundred-Percent Coverage" above). Despite the fact that these difficulties prevent a recommendation for legislation per se, Chapter 7 proposes an innovative application of the depositor preference principle that captures the benefits, but avoids most of the costs associated with preference legislation.

Conclusions

The complex nature of bank assets narrows the scope for expanding the role of market discipline at the bank level. Where assets have significant idiosyncracies and large information costs, markets do not arise spontaneously and it is efficient that they do not (Woodward (1988), p. 687). Real social costs may be incurred if market mechanisms are forced upon activities that inherently are better suited to alternative institutional arrangements.

In the absence of concrete information regarding which institutional arrangements are optimal at a given time, or knowledge of the pace at which evolution is changing the optimal arrangements (if at all), it is important to

avoid premature experiments that may have irreversible consequences.³⁸ While market discipline clearly plays an important role in controlling risk, it is not clear that present circumstances warrant an expanded role for market mechanisms at all loci of risk control within the bank: In most areas at the bank level, it is not apparent that greater market discipline is now necessary or potentially more beneficial.

Greater reliance on the market is most questionable in the area of depositor discipline. The primary goal of deposit insurance is to remove the untoward effects of bank runs without otherwise altering the (unfettered) market outcome. This suggests that escalating the threat of runs by exposing depositors to greater risk is unwarranted unless it can be shown that this is imperative for controlling risk (or, what amounts to the same thing, that present coverage levels excessively (or unnecessarily) distort the free-market outcome). No such finding is clearly supportable by the arguments or evidence adduced in this chapter.

With respect to capital, subordinated debt, information disclosure, and the related market mechanisms discussed in this chapter, any significant expansion of the market's role in these areas threatens to impair the unique intermediary function of banks. Certain of these mechanisms offer distinct benefits that may appear more or less compelling under changed circumstances, and it is appropriate to reevaluate the probable benefits and costs as financial evolution proceeds. At present, however, it is not evident that further injections of these market forces offer economic benefits that outweigh the social costs of the accompanying impediments to bank financial intermediation.

FOOTNOTES

¹Excessive capital requirements or extended liability rules might be examples.

²Other issues are relevant, such as the FDIC's costs in handling bank failures, and equity in the treatment of large- and small-bank depositors. These issues affect the decision on whether to alter the coverage limit in a particular way, but do not bear on the original purposes of insurance coverage. The primary function of deposit insurance coverage is presumably not to minimize the FDIC's costs or redress inequities, but to correct a perceived market failure, i.e., to provide a setting that improves (unambiguously) upon the results of a free-market arrangement (as determined by Paretian analysis of economic welfare). It follows that this primary policy goal takes precedence in determining the optimal level of statutory coverage.

³In virtually every failing-bank case, some uninsured deposits leave the bank in the period immediately preceding failure (defined by the declaration of the chartering authority). Cases such as Continental Illinois, First Republic, and others, demonstrate that such withdrawals may develop into runs that create a terminal liquidity crisis for the affected institution.

⁴The fundamental historical facts are well known, e.g., that there were seven or so discernable banking "panics" (contagions of varied origin) prior to the establishment of deposit insurance in the U.S. and that, while not the norm, runs originally confined to one bank did sometimes precipitate runs on other institutions even in the absence of a generalized panic.

⁵See both Kaufman (1988) and Schwartz (1987) versus Goodhart (1987).

⁶The choice involves the conceptual framework, or analytical "paradigm," that should be used for understanding, evaluating, and selecting among alternative banking arrangements. All paradigms embody two components: a theory of economic behavior (a system of reasoning by which the expected economic effects of actual or proposed arrangements are inferred), and a set of prioritized policy objectives (a preference ordering by which the costs and benefits of the expected effects are weighed so that alternative arrangements can be ranked). Recognition of the paradigm behind a policy proposal is necessary in order to determine whether there is a defensible logic and a consistent value system--a sound analytical infrastructure--that form a coherent policy strategy. (This usage of "paradigm" follows that of Kuhn (1970)).

⁷Stated differently, according to this perspective the moral hazard problem is dynamically unstable and uncontainable in the absence of depositor discipline.

⁸For example, the examiner's wealth (promotion, success, etc.) does not depend nearly so much upon "results"--that is, upon the actual frequency with which the examiner detects excessive risk-taking in time to avoid losses to the insurance fund--as it does upon following prescribed procedures.

⁸cent Bankers, or the stockholders for whom the bank is managed, stand to gain personally and directly by actually winning the hide-and-seek game played with examiners. Thus, they generally seek out new, unregulated forms of risk-taking, i.e., forms that the examiner has not yet been expected to identify (Kane (1981)). The banker can remain one step ahead of the supervisor in this manner.

Diluted and conflicting incentives place the insurer's management at a similar comparative disadvantage, as described in the economic theories of regulation and public bureaucracy (Buchanan (1975); Tullock (1965); Stigler (1971); Posner (1974); Kane (1981); Gwartney and Stroup (1982)). Again, private-wealth incentives favor a long-run outcome in which banks successfully innovate around constraints. Moreover, public-sector incentives are such that regulated firms may have an advantage in the bargaining that shapes regulatory policy. The incentives in the public sector are biased in favor of policies with clearly visible, short-term benefits, but hidden or long-run costs. This ensures a record of identifiable "successes" under the reigning leadership, which may be promoted to its further advantage. There is evidence to suggest that private firms are able to exploit this public-sector bias (Gwartney and Stroup (1982)). Thus, incentives are such that the "compromises" worked out between regulators and regulated firms are likely to produce visible, short-run benefits to the economy, but at the risk of hidden or longer-run costs that grow out of unconstrained profit opportunities successfully negotiated by the regulated firms.

⁹This is not to suggest that supervision cannot be effective in combination with depositor incentives to monitor risk. There is clear evidence--55 years of FDIC experience--that it can be. The argument here refers to reliance on supervision in place of depositor discipline. It is an argument against "too much" insurance coverage and not against deposit insurance per se.

¹⁰Note that neither view necessarily calls for changes in the statutory limit. For example, it is consistent with the "depositor discipline" approach to hold that the present limit would be satisfactory if it were enforced. A perspective based solely on bank "uniqueness" (liquidity transformation) might also accept the present limit as the practical maximum in light of the occasional failures to find buyers for defunct banks and the implications of this for the insurance fund. Acceptance of bank uniqueness also leaves room to recognize the incentive problems identified in the "depositor discipline" approach, thus suggesting that the existing level of coverage could potentially represent an acceptable trade-off.

¹¹This follows from the suggestion in Chapter 2 that moral hazard is not necessarily unstable dynamically and does not appear to be out of control.

¹²Formally, it is true that so long as there is depositor discipline, there is also the theoretical threat of runs with its deleterious effect on liquidity transformation. However, the theoretical possibility of runs on solvent institutions has not been borne out in practice, as noted. This may be because of "conjectural" (de facto) guarantees or it may be that the relationship between coverage levels and the probability of runs is more step-like than linear. Regardless, there is reason to believe that the

¹²cont. present setting succeeds in providing run-free risk premiums on deposits without destabilizing the balance of bank-portfolio risks (Chapter 2), and this warrants considerable weight in contemplating proposed changes in the coverage limit.

¹³This statement assumes that the coverage limit is enforced and that the criteria defining an insurable deposit remain the same.

¹⁴The inflation-unemployment trade-off provides a useful analogy. There is no particular point on the short-run Phillips curve that is unambiguously preferred to all others. The relative magnitudes of the social costs generated by inflation and unemployment are not objectively quantifiable. Thus, we never could decide conclusively which point on the curve is the optimum selection, even if we knew the shape and position of the curve at any given moment (which we do not). A reasonable policy response is to alter the terms of the trade-off so that, whatever our current position on the curve, the consequences of the associated inflation and unemployment are both less harmful than they would be otherwise. Examples might include the provision of job-information services to speed the rehiring of displaced workers, tax indexation to mitigate the real effects of inflation and, more generally, the removal of distortions to facilitate speedier and more efficient market adjustments.

¹⁵Strictly speaking, no component of true economic costs is fully objective. See Buchanan (1966). Here, "objective" means costs that are routinely measured by economists using widely-accepted estimation techniques.

¹⁶Longer-term deposits also can be a source of "runs" in that depositors may decline to "roll over" this type of bank debt. This is different from the traditional notion of a bank run and it entails different costs than those that form the basis for deposit insurance protection. As described in Chapter 2, it is the immediate, forced liquidation of bank assets entailed by a (traditional) run that generates the types of costs that provide a rationale for deposit insurance.

¹⁷In the framework of footnote 14, it is alleged that the present operation of the deposit insurance system amounts to the selection of a "corner solution" on the curve, corresponding to a maximum protection against runs and zero depositor discipline.

¹⁸See Humphrey (1976), Field (1985), Silverberg and Fleschig (1978), Leff (1976), and the references there cited for more details and alternative arguments.

¹⁹The remainder of this section borrows heavily from Nejezchleb (1987).

²⁰See Baer and Brewer (1986); and Hannan and Hanweck (1988).

²¹Following the analysis described in footnote 14, this appears merely to result in a different location on the same trade-off curve, rather than to alter the terms of the trade-off in the desired manner.

²²The same criticism applies to those proposals that attempt to replace depositor discipline--and simultaneously to reduce dependence upon bank supervision--with private-sector participation in the provision of deposit insurance. Some schemes would require 100 percent, explicit coverage of deposits (or large-bank deposits only), thereby creating a market for private, supplemental insurance. As is evident from previous arguments, there are fundamental reasons to doubt that such an artificial injection of market forces would represent an improvement over present arrangements.

In particular, there is a real concern about the stability of such a system in the event of a large deposit insurer's failure. Moreover, for most proposals along these lines, there are unresolved questions about the economic viability of private insurance (for example, why hasn't such a market for private, supplemental insurance arisen spontaneously, even during periods when pay-offs were routinely used to resolve failures?), and there are remaining concerns about the apparent incentives for private insurers to hide losses and to price insurance in a way that prematurely seals the fate of troubled-but-solvent institutions.

For those "self-insurance" proposals in which existing bank capital stands behind the private insurers, it also remains to confirm the implicit assumption that there is sufficient excess capital (relative to private risk) among individual institutions to successfully fund the system without either weakening the restraint on risk-taking or raising capital requirements unacceptably (see "Capital and Subordinated Debt," to follow). Chapter 3 contains a general discussion of private-sector proposals and a specific reference to Baer (1985). Additional information is found in Short and O'Driscoll (1983), England (1988), Ely (1986), and the references there cited. Konstas (1988) offers a supplemental private-sector scheme that directly addresses some of the above concerns.

²³See Mussa (1986a), Kane (1985a), FDIC (1983), and their references.

²⁴It is not certain that deposit brokerage enhances the efficiency of the deposit allocation process but, in the absence of evidence to the contrary, efficiency-enhancement seems a likely source of its economic viability.

²⁵The argument is not that the market is inefficient: It is not denied that the information will be used in such a way as to produce unbiased forecast errors. The argument is that, even though the new information can only improve market forecasts, if the outcome includes a higher incidence or greater threat of bank runs, it is not clear that this outcome should be preferred. Moreover, it is of questionable benefit to artificially encourage an expanded role for the market in a process involving asset characteristics that are inherently unconformable to market valuation.

²⁶In other words, if banks have the option to disclose information of their choice, then:

the benefits of terminating de facto insurance may be smaller than first thought (Pennacchi (1986), p. 466).

²⁷See Cargill (1988); Hirschhorn (1987); and, for earlier evidence, Johnson and Meyer (1977). See Benston (1984) for a discussion of the incentives to gather such information among different groups with a potential stake in the bank's performance.

²⁸Technically, this claims that the necessary conditions for the Modigliani-Miller theorem (1958) are met. The value of a firm is thus the expected present value of its net cash flows, and this does not depend upon the proportions of debt and equity claims against it (French (1988)). Operationally, this implies that investors require lower risk premiums on a bank's debt when it is better capitalized, thus offsetting any increase in the total cost of capital (Horvitz (1988b)).

²⁹More generally, the literature on "signalling" and agency problems shows how imperfect information leads to higher capital costs when firms go to the equity market. See Greenwald, Stiglitz, and Weiss (1984), Stiglitz (1985), Ross (1977), Asquith and Mullins (1983), Diamond (1988), and the literature there cited.

³⁰The actual (net) change in the sectoral allocation of capital is impossible to predict without further information. The crucial variable is the price elasticity of demand for bank capital. A higher cost of bank capital may result in fewer banks and less funds allocated to the banking sector if demand is price inelastic. Thus, raising bank capital requirements may either increase or decrease the aggregate flow of funds to the real sector, depending upon this elasticity.

³¹One alleged cost of higher capital requirements for which there is little theoretical or empirical support is a presumed encouragement to additional risk-taking. The notion is that banks will have incentives to take greater risk in order to raise the rate of return such that the market willingly holds the additional equity shares necessary to satisfy the capital requirement (see Wall (1985) for further information). However, closer examination of the theory (Furlong and Keeley (1987a)) and evidence (Keeley (1988)) finds inadequate support for this claim.

³²Moral hazard is perhaps the single most important element of the deposit insurance subsidy question, judging by relative quantities of research effort expended. See the studies cited by Kane (1985a).

³³Stated differently, greater capital requirements would impose costs on too many institutions for which no concomitant social benefit can be expected at this time. This is not to say that such requirements may not be appropriate in the future under different circumstances.

³⁴Subordinated debt is formally equivalent to a risk-free bond and a call option on the bank's assets.

³⁵Avery, Belton, and Goldberg (1988), p.608.

³⁶See Avery, Belton, and Goldberg (1988), p. 609, for further explanation and references to previous studies.

³⁷These states are: Alaska, California, Colorado, Georgia, Hawaii, Idaho, Indiana, Iowa, Kansas, Louisiana, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Tennessee, Texas, Utah, Virginia, and West Virginia.

³⁸As long as there remains a plausibly sound reason for treating banks specially via deposit insurance, then the fact that deposit insurance is already in place supports a conservative posture in considering measures that may impact banks' special intermediation function. Only clear evidence that this latter function is obsolete, or changing in its fundamental nature, would warrant a fundamental change in posture.

Chapter 5

SUPERVISION

Market discipline has a role to play in controlling industry risk. However, it cannot be relied on exclusively to protect the deposit insurance system. Market mechanisms to control risk must be complemented by strong and effective bank regulation and supervision.

This chapter addresses supervision from the FDIC's perspective as the insuring agency that pays the bill when bank failures occur. It assumes that the present structure of the banking agencies will remain essentially unchanged for the foreseeable future. Therefore, the recommendations presented for improving supervision necessarily take into consideration the constraints imposed by the existing supervisory structure.

The chapter opens with a description of the existing supervisory structure. The second half of the chapter includes a general discussion of some basic underlying principles of supervision, followed by a more detailed look at three major areas of concern--(a) the examination function; (b) the enforcement process; and (c) the applications process. Policies and programs currently used to monitor and control industry risk are discussed for each area, and specific recommendations are made to help meet the challenges ahead.

The Existing Supervisory Structure

Proposals for improving supervision are intertwined with the complex supervisory structure that monitors the banking industry today. The purpose of this section is not to recommend structural changes in the supervisory framework, but to suggest ways to make it work better. First, however, it is necessary to review how the present system works.

The Agencies Involved

From very modest beginnings, oversight of the U.S. banking system has become as complex as today's financial marketplace. Authority is shared by five primary federal agencies, numerous secondary agencies that supervise certain activities or markets in which financial institutions participate, and banking departments and agencies in each of the 50 states plus the territories and other areas. This system has evolved in response to historical developments and the complexity of the marketplace.

Supervision of the Nation's more than 13,800 FDIC-insured banks (as of midyear 1988) is divided among the OCC, the Federal Reserve, the FDIC, state banking departments and, for certain activities, the SEC and the Justice Department. Both the federal and state governments charter commercial and savings banks. Commercial banks with national charters are regulated and supervised by the OCC and insured by the FDIC. Commercial banks with state charters that are members of the Federal Reserve System (state "member" banks) are regulated and supervised by the state regulator and the Federal Reserve,

and insured by the FDIC. State-chartered commercial banks that are not members of the Federal Reserve (state "nonmember" banks) and state-chartered savings banks are regulated and supervised by the state regulator and the FDIC if they are FDIC-insured. In addition, the FDIC insures a small number of savings banks regulated by the FHLBB that originated as state-chartered institutions but subsequently converted to a federal charter. The number and asset share of the different types of FDIC-insured banks are shown in Table 1.

Table 1
DISTRIBUTION OF FDIC-INSURED BANKS
June 30, 1988

<u>Type</u>	<u>Number</u>	<u>Percent of banks</u>	<u>Assets (\$MM)</u>	<u>Percent of Total Bank Assets</u>
State Nonmember Banks	7,860	56.6	\$ 712,959	21.7
State Member Banks	1,074	7.7	541,047	16.5
National Banks	4,477	32.3	1,801,280	54.8
Savings Banks (Federal Charter)	15	0.1	25,375	0.8
Savings Banks (State Charter)	<u>455</u>	<u>3.3</u>	<u>203,554</u>	<u>6.2</u>
Total	13,881	100.0	\$3,284,215	100.0

While each of the banking agencies has its own mission, the FDIC, as insurer, is the only agency directly responsible for maintaining the soundness of the insurance fund, protecting insured depositors and handling bank failures. The FDIC has authority to examine all insured banks regardless of charter. However, the FDIC traditionally has relied largely on the OCC and the Federal Reserve for safety-and-soundness information on national and state

member banks, and limited its examination activity in these banks to specific problem institutions. Equally important, the FDIC has limited rule-making or enforcement authority over national and state member banks, thus hampering its ability to protect its insurance interests.

Supervision and regulation of banks is but one of two levels of federal concern. Oversight also exists for parent holding companies of banks. When the Bank Holding Company Act of 1956 was passed there were only 53 registered holding companies. That number had increased to 6,285 by June 30, 1988, and this type of organizational structure has grown to become the dominant form in which most U.S. banking assets are held. Under current law the Federal Reserve supervises all registered bank holding companies in the United States, even though, in most cases, it does not supervise the subsidiary bank or banks of these firms.

One of the more obvious areas of overlap is between state and federal requirements. Over the years the effectiveness of the "dual banking system" has been an issue that has generated considerable debate. There is no question that the structure places added costs and reporting burdens on financial institutions. Banks must be aware of all changes at both the state and federal levels and be able to adjust their operations accordingly. At times the system can be inefficient and inequitable, and coordination between the state and federal regulators can be difficult. As financial institutions continue to expand both geographically and operationally, the coordination of supervision will become more important, yet more difficult.

On the other hand, the existence of a dual federal and state chartering system through the years has provided a safety valve against outdated or inflexible controls imposed at either the federal or state level. A state has the opportunity with its chartering authority to establish the ground rules under which banking is conducted within its boundaries. This has enabled states to act as laboratories of change by experimenting with new products and services. Congress extended a variety of new services nationwide only after one or more states demonstrated the value of these services to the public.

Interagency Cooperation

The federal regulatory apparatus that has evolved was not designed to encourage interagency cooperation. In the 1930s, Congress believed that the individual sectors were sufficiently insulated by statute from competing with each other; therefore, coordination among the banking agencies was not an important goal. That view has been altered by unfolding events. Deregulation and advances in technology have shown that cooperation among the banking agencies now is essential.

Interagency cooperation always has been a major FDIC concern. This is because of both the limited enforcement and regulatory authority the FDIC has over national and state member banks and the sharing of responsibility with each state for insured nonmember banks. The FDIC has no authority to charter or close a bank. It must depend solely on the chartering authority to declare a bank insolvent, and to close it, thereby triggering the subsequent insurance responsibilities. The FDIC must rely solely on OCC and Federal Reserve

decisions in granting insurance for national and state member banks. However, it shares responsibility with the states on nonmember banks.

Interagency cooperation also is necessary to help ensure consistent supervision, to streamline the supervisory process as much as possible, and to reduce the overall regulatory burden on banks. Over the years, bank supervisors have worked together, first with an informal interagency committee structure, and then through the Federal Financial Institutions Examination Council (FFIEC), which was established in 1978.

The banking agencies have developed a number of policies that have improved the flow of confidential information between supervisors. For example, the Shared National Credit Program promotes efficient use of examination resources through coordinated and uniform supervisory treatment of large loans in which two or more banks participate. Another example is the cooperative examination programs for multibank holding companies and for multinational institutions that, due to their size, represent a significant risk exposure to the FDIC. Through arrangements such as these, the FDIC has been better able to assess potential risk to the insurance fund and to have at least an informal role in controlling risk in those institutions.

Interagency cooperation also has enabled the banking agencies to exert some influence on the supervisory posture of one another. Bank capital standards are an important example of this. In 1985, in response to a requirement in the International Lending Supervision Act that minimum capital standards be established, the banking agencies adopted uniform rules requiring all FDIC-insured institutions without material problems to maintain total

capital and reserves of at least six percent of assets, with a minimum primary ratio of 5.5 percent of assets. These regulations were designed to supplement, not replace, the qualitative evaluation of an institution's overall financial condition. More recently, the banking agencies worked closely together to develop a risk-based capital proposal that brings the capital adequacy policies of the United States and other major industrial countries into close alignment. The proposal also recognizes off-balance-sheet exposure; reduces disincentives to hold liquid, low-risk assets; and makes regulatory capital requirements more sensitive to the risk profiles of individual institutions.

Federal/State Cooperation

Supervisory cooperation between the FDIC and the state banking departments also has been significant. Emphasis has been placed on reducing the dual regulatory burden as much as possible. Most enforcement and supervisory actions are cooperative efforts.

Over the years, the FDIC has entered into a number of formal and informal examination programs with the state banking departments. The FDIC's goal is to conduct onsite examinations of all state nonmember banks rated 3, 4 and 5 at least annually, and 1- and 2-rated banks at least every two years. Most state examinations of 1-, 2-, and 3-rated banks are counted the same as examinations by the FDIC for the purpose of tracking adherence to the examination schedule guidelines. Meetings are held between individual state and FDIC representatives to develop cooperative examination schedules so that

each agency will know with greater certainty their future resource requirements.

The Basic Principles of Bank Supervision

Before discussing recommendations for improving specific areas of the supervisory process, it is important to be mindful of certain fundamental principles upon which bank supervision is based. First and foremost, it is in the best interest of the Nation to have a safe-and-sound banking system. The supervisor's job is to maintain safety-and-soundness through sufficient oversight of and interaction with bank management, in order to minimize the chances of bank failure. When a bank gets into trouble, or is headed for trouble, corrective action must be initiated together with appropriate follow-up measures to ensure that corrections are made. But when those actions fail, the success of the system requires poorly managed, financially weak institutions to exit in an orderly manner. Supervisors cannot be expected to eliminate all risk in the system, to prevent all bank failures, or to act as a substitute for private management. To do this would require either nationalization of the banking system and/or a severe limitation on permissible banking activities, neither of which is desirable nor beneficial.

The supervisory approach necessary to achieve the goals of maintaining a safe-and-sound system and controlling risk in individual banks must evolve as the industry evolves. Historically, bank supervision was accomplished through onsite examination of each bank each year. This often resulted in some banks receiving too much supervision and others not enough.

Today, traditional methods are giving way to a more continuous, forward-looking form of supervision. Because of the way banks now function, supervisors must focus more on risk and the root causes of risk before serious problems develop. Instead of just looking at individual transactions, increased attention is given to systems and controls. Onsite examinations remain the most important element in the process, but they must be augmented by the best possible system of offsite monitoring and other anticipatory measures. Instead of performing onsite examinations based on a fixed examination cycle, more emphasis now is placed on identifying economic and industry risk and identifying individual banks that exhibit symptoms of higher risk. Supervisory resources are concentrated on these risks--whether this requires an examination, a short visit or just a telephone call. However, the practical reality is that even with a system of anticipatory supervision, it is difficult for the bank examiner to be an effective naysayer when things appear to be going right. Supervisors can warn and cajole a bank about potential problems, but if a bank is making a profit or if "everybody is doing it," the due-process procedures that properly limit a supervisor's enforcement authority make it difficult to bring about a change in behavior.

The FDIC's supervision is guided by the following goals:

- o To maintain a safe-and-sound banking system and public confidence in that system;
- o To enforce applicable laws, rules and regulations that govern banking;

- o To preserve the financial viability of the FDIC insurance fund by minimizing bank failures and failure-resolution costs to the fullest extent possible;
- o To emphasize private-sector resolution of banking problems;
- o To encourage competition;
- o To ensure adequate consumer services and protection; and
- o To foster the dual banking system.

Each banking agency has at least some, if not most, of these same goals, although priorities may differ. The FDIC, for example, is the only commercial-bank supervisor with the specific goal of maintaining the financial integrity of the insurance fund. That goal gives the FDIC a strong incentive for early detection of, and strict supervision over, risks in all insured banks. If differences between banking agencies over a problem institution result in either a delayed or incorrect supervisory response, it is the FDIC that must eventually absorb the loss.

With these guiding principles in mind, a more detailed review of the overall supervisory process and how it can be improved follows. The discussion focuses on three basic areas: (1) the examination function; (2) enforcement actions; and (3) the applications process.

The Examination Function

Onsite Examinations

Within the context of maintaining public confidence in the integrity of the banking system and protecting the insurance fund, examinations have five basic objectives: (1) to analyze the bank's financial condition; (2) to appraise the quality of bank management, including the board of directors; (3) to determine overall compliance with applicable laws and regulations; (4) to identify areas where corrective action may be necessary; and (5) to establish a factual record to support recommendations for corrective action.

Examiners evaluate the quality of assets, the level and trend of earnings, and liquidity; determine whether capital levels are adequate; review adherence to laws and regulations; and analyze internal policies and controls, including those designed to ensure that all transactions with insiders are at arm's length. Most important of all is the evaluation of the bank's management: its abilities, policies, procedures and controls.

In recent years, a number of important steps have been taken to improve oversight. In keeping with the movement toward a continuous supervisory concept, the banking agencies have devised methods to increase the number of onsite contacts with banks, and have directed more resources to effective offsite monitoring systems. The FDIC, after evaluating its staffing resources, operating procedures and the appropriate level of onsite

examinations, adopted an examination-frequency cycle designed to put more examiners into banks more often. The emphasis was placed on troubled institutions and on those banks exhibiting adverse trends. The goal is to have an onsite examination every 24 months for well-rated and stable institutions (those rated 1 or 2), and an onsite examination every 12 months for problem and near-problem institutions (those rated 3, 4 or 5).

Full use is made of visitations and targeted examinations. These usually involve a small number of examiners visiting banks for shorter periods and focusing on specific areas within each bank. For example, visitations are used to monitor compliance with a formal or informal enforcement action, to follow up on deficiencies noted at a previous examination, and to investigate banks flagged by offsite monitoring systems. Visitations also are used to routinely monitor the progress of newly insured institutions, those under new ownership or management, and banks that have received FDIC financial assistance. The OCC has carried the visitation program one step further by maintaining a continuous, onsite presence at the largest multinational institutions.

Staff Resources

A policy of more frequent onsite contacts, combined with more sophisticated offsite monitoring techniques, requires a highly trained, efficient and motivated examination staff. All of the agencies have had problems recruiting and retaining qualified staff. Now, however, the situation is even more critical because of the complexities and importance of

the job. Solving this problem is a major challenge. Over the past decade the banking agencies have endured hiring freezes, increasing workloads, high turnover rates and differentials in compensation packages between the banking agencies and the private sector.

Recruitment and turnover problems highlight only one side of the staffing issue. The other side involves the heightened demands on existing staff in recent years. First, following the enactment of comprehensive and complex civil rights and consumer protection statutes, the banking agencies, which are charged with the responsibility of enforcing those laws as they apply to banks, established specialty career paths and required their generalist examiners to take intensive training in these new areas. Second, new complexities in other specialty areas such as trust and electronic data processing have placed increased demands on staff resources that traditionally had been earmarked for safety-and-soundness work. Third, in addition to the foregoing, there are new pressures on examiners to deal with securities, real estate, insurance and other activities in which banks may soon be able to engage. Finally, to compound matters, the number of problem banks and bank failures have increased dramatically.

The FDIC's safety-and-soundness supervisory effort was particularly hindered by the necessity to assign many examiners to assist in closing and liquidating failed banks for extended periods. To give perspective, in 1978 the FDIC had 1,760 field examiners with 342 problem banks and seven bank failures to handle. By 1984, the number of field examiners had declined to 1,389. Although the number of field examiners has subsequently increased to 2,029 as of September 30, 1988, 1,072 of them are relatively inexperienced

trainee or assistant examiners. This inexperienced staff must cope with over 1,400 problem banks. In addition, over 200 banks failed or required assistance in 1988. To better utilize available resources, the banking agencies have expanded their use of automation and personal computers. Nevertheless, demands on the supervisory staff continue to strain resources.

Offsite Monitoring

Perhaps the most important contribution in recent years to a program of more continuous supervision and more efficient resource utilization is the creation of an effective offsite monitoring program. Offsite monitoring requires a heavy reliance on the ability to obtain and analyze accurate and timely information from a variety of sources. At present, the most important source of information to the banking agencies is the quarterly Call Report.

Prior to the development of offsite monitoring systems, Call Reports were used primarily to collect data for assessment purposes, research projects and publication of statistical tables. The reports have been expanded to become the focal point for offsite monitoring. Data collected are subjected to a variety of screens and sophisticated computer models designed to identify high-risk institutions or unusual industry trends.

Each of the banking agencies has sophisticated offsite monitoring systems. The FDIC's principal system is called CAEL, an acronym for Capital, Asset quality, Earnings performance, and Liquidity. It compares ratios calculated from bank-provided Call Report data to comparable information taken

from the last report of examination and to ratios for the bank's peer group. Based on the results of these comparisons, the model computes a rating for each of the four components and compares them to the component ratings assigned at the last examination. A significant difference will trigger an appropriate follow-up on the part of supervisors. From its inception in 1985, CAEL has proven to be a reliable offsite tool for identifying potential problems.

Fraud and Insider Abuse

Many observers perceive an increase of fraud and insider abuse in recent years. This has been attributed to: (a) depressed regional economic conditions which sometimes have encouraged desperate efforts by bankers; (b) proliferation of new financial products and instruments that are not always well understood by those who either provide or use them; (c) advances in technology that often provide capabilities before adequate controls can be developed; and (d) easier access to funds through fully-insured brokered deposits.

Traditionally, the onsite examination process has been the primary vehicle used to uncover fraud and insider abuse. A thorough inspection of significant insider transactions is part of every bank examination. Insider transactions are reviewed for compliance with laws and regulations, adherence to the bank's own policies, fairness, consistency with reported information, and credit quality. Because examiners are in the bank only occasionally, they must rely, in part, on information provided by bank personnel and the internal and external auditors. Even with such assistance, detecting and investigating

fraud in financial institutions is a difficult, time-consuming and labor-intensive process. To assist both examiners and bankers, the FDIC has developed a list of "red flags" or warning signs to help spot possible abuse.

In addition, the banking agencies encourage banks to develop strong internal lines of defense, consisting of an active, knowledgeable management and board, and a sound system of internal controls, combined with an adequate external audit program. Systems and controls that anticipate and identify problems as they develop are essential. Moreover, bank management, starting at the board level, must create a professional environment within the bank that embraces the highest ethical standards.

Recommendations for Improving the Examination Function

Despite the move toward more continuous and anticipatory oversight, recent problems have shown that the supervisory process remains vulnerable in some major areas. First, banks are susceptible to added risks from increased competition, new and often nontraditional activities, rapidly changing technology, and a lack of adequate industry and geographic diversification in lending which exposes banks to the effects of volatile and uneven economic performance. Second, fraudulent activities and insider abuse are difficult to detect and appear to have been on the rise. Third, the banking agencies sometimes lack timely and comprehensive information from which to make informed decisions. Fourth, there appears to be a shortage of qualified bank managers, especially in areas where the number of banks has increased significantly. Fifth, the FDIC, as insurer, has inadequate authority to deal

with its potential exposure on a timely basis and to minimize the risk to the fund.

The following recommendations attempt to address these vulnerabilities. In some cases only modest adjustments to established procedures or clarification of existing authority are necessary. In other cases the recommendations will require a more significant reallocation of resources or statutory changes.

1. As insurer, the FDIC needs clear authority to participate in examinations of all insured banks and their affiliates whenever necessary.

Fundamental to any successful insurance program is the authority to assess and control risk over the insured entity. Traditionally, the FDIC has relied on the OCC and the Federal Reserve for information on national and state member banks, while generally limiting its involvement to specific problem institutions under prearranged cooperative examination agreements. However, because of its unique mission, the insurer may view certain risks differently than do the other banking agencies and periodically must conduct a firsthand evaluation of that risk. The FDIC believes Section 10(b) of the FDI Act provides the authority to examine all insured banks and their affiliates whenever necessary. This interpretation has not always been accepted by the other federal agencies. Whatever legal ambiguity exists should be clarified in favor of the insurer. Any FDIC exercise of such authority would be in close coordination and cooperation with the primary federal supervisor.

2. The banking agencies must develop improved methods for identifying risk, setting priorities and allocating resources effectively. These include: (a) improved offsite monitoring with online computer access to large banks and banks exhibiting a high-risk profile; (b) more effective economic and industry-analysis programs; and (c) improved coordination of information-gathering mechanisms.

Offsite monitoring through online information retrieval. The banking agencies already have taken initiatives to develop sophisticated offsite monitoring systems to help set priorities for allocating resources. Nevertheless, much still needs to be done. Delays occur in generating offsite monitoring data due to the 75-day cycle required to collect, edit, correct and disseminate Call Reports. Currently, the agencies are attempting to address the problem by devising ways to collect data electronically, by emphasizing the importance of the Reports so that banks will complete them in a timely and more accurate manner, and by pursuing the authority to impose stiffer penalties for inaccurate or late reporting.

However, even if the Call Report processing time were reduced from its present 75-day cycle, the fact remains that the banking agencies only receive quarterly data. In today's environment, when the condition of a bank literally can change overnight, the regulatory agencies should have the most current information available. The best way to obtain current financial information is to develop an online data-retrieval system that, at a minimum, connects the appropriate banking agency(ies) to banks with resources of \$1 billion or more, as well as to those institutions that have high-risk profiles. Such an online data-retrieval capability could be used to determine the impact that a major event or shock would have on the economy and the banking system. For example, if there were a significant change in oil prices or the stock market, or a major country defaulted on its bank loans, or questions arose about the volume and degree of risk in a particular loan category, the agencies could access the information quickly and be able to respond in a timely manner.

Develop a more effective program for industry analysis. The banking agencies should do a better job monitoring the performance of certain industries and regions around the country. The recent problems in the agricultural, energy, and real-estate industries clearly indicate how bank performance can closely track the performance of particular industries or regions. Given the relatively small size of most banks, loan concentrations in local or regional economies, as well as in various industries, are not uncommon. In fact, until asset-securitization markets for local and regional credits are more widely established, thus allowing small banks to diversify risk, it may not be practical, nor in most cases wise, for a bank to lend outside its local market area. This makes it especially important for the banking agencies to improve their ability to track the performance of certain industries and regional economies, and to use that information as an early indication of potential problems.

The key to estimating bank exposure to a given industry is the ability to identify loans by industry group. To a limited extent the Call Report and bank examinations serve this function, but the process is not coordinated among the agencies and results have been inconclusive. Well-defined industry codes are required. Industry-concentration data can be collected through the Call Report and bank examinations, but such data need to be consolidated into a common database. This will require a coordinated interagency effort.

Coordinate the information-gathering process to set priorities. In addition to the development of various quantitative methods, there are more qualitative factors to consider. Useful information can be obtained from

local or regional news media, discussions with bankers or other regulators, consumer complaints and even insider tips. Additional information comes from correspondence with the banks. The challenge is to better organize the flow of information so that it can be channeled with the quantitative information to establish priorities and to allocate resources more effectively.

3. The banking agencies must reemphasize and develop better ways to work together and streamline the examination function and information flows among the agencies.

Establish an effective Cooperative Examination Program. The Cooperative Examination Program, as originally conceived, had a twofold purpose: it gave the FDIC firsthand knowledge of the insurance risks associated with some of the larger and/or problem national and state member banks, and it gave the FDIC additional experience in supervising large, nonproblem multinational institutions.

The FDIC's need for a direct onsite assessment of its largest insurance exposures is even more critical now than it was when the program was first conceived. A successful joint program with the OCC and the Federal Reserve would give the FDIC greater flexibility to gather data, assess alternatives and select the best solution to problem situations in the most timely manner. The original program has not been as successful as originally anticipated primarily because of limited resources and different priorities among the agencies. Assuming that resource problems can be resolved and priorities mutually agreed upon, the FDIC's needs as insurer can be met largely through a reactivated Cooperative Examination Program.

Develop more proactive supervisory mechanisms including interagency regional directives. New supervisory problems generally surface at a local or regional level before they become a national concern. When such issues reach the level of national concern, agency officials in Washington meet to develop an acceptable interagency agreement appropriate for the entire country. These policies then are carried out at the regional and local level.

However, many important regional issues never rise to the level of national concern, and those that do may become so critical by the time a national policy statement is issued that it may be too late to benefit the region where the problem originally surfaced. To speed up the regulatory response for regional issues and to address issues that remain regional, better local cooperation among the agencies must be developed. A mechanism should be established to encourage the exchange of information and coordinated action so that regional bank letters or policy statements can be issued as soon as possible.

In the Southwest, where the highly competitive environment first led to underwriting shortcuts and then to ignoring many prudential lending standards altogether, a prompt coordinated regional interagency response when the problems were first developing might have significantly reduced the size and impact of the ultimate problem. Such a program might have included educational and promotional programs and seminars for bankers on proper lending practices, and written advisories or letters explaining the problems and the supervisory concerns. All of these actions could become part of an effective public-relations campaign to increase the industry's awareness of

emerging trends and related potential problems, and to inform bankers that examiners will look closely at certain lending and operational practices.

4. The banking agencies must be able to hire and retain a staff of highly skilled, experienced and motivated professionals who can successfully carry out the examination function.

An examination program that includes more continuous onsite and offsite monitoring must address staffing issues. No effective examination program can be maintained without a hardworking, dedicated, highly skilled and experienced staff.

The banking agencies are people-intensive organizations that must maintain extensive and costly recruitment and training programs. College graduates undergo on-the-job and classroom training over a four- or five-year period before they become experienced bank examiners. These training requirements will continue to expand as technological advances and expanded powers permit banks to engage in a wider, and more complex array of activities.

Once trained, examiners have skills that are attractive to banks and other financial-service organizations. As a result, the banking agencies have suffered from high turnover levels, leaving the agencies with a relatively inexperienced staff. Recruitment efforts and the ability to retain experienced personnel are complicated by salary caps, private-/public-sector compensation differentials and periodic budget cuts and hiring freezes. Hiring freezes create experience gaps at various organizational levels which, once lifted, create training and promotional bottlenecks as the agencies try to catch up. Salary caps, while generally not affecting new employees

directly, tend to demoralize the most experienced staff and often provide the incentive for the best people to leave. Moreover, the new federal retirement system does not have the same "penalty" for leaving federal service early as does the old system. Therefore, experienced employees will have an additional incentive to leave federal service in the future.

5. Regional economic oversight committees should be established to evaluate risk in the industry.

The supervisory mechanisms discussed up to this point have focused entirely on the banking agencies. But supervision has its limitations. At some point the industry has to assume more direct responsibility for itself. With the turbulence in banking today and the extreme pressures that already have been placed on the banking agencies, it is in the industry's self-interest to develop better ways to identify and address adverse trends. Chapter 8 includes a recommendation that insurance premiums be tied to the level of FDIC losses, thus creating an incentive for bankers to reduce risk in their industry.

One approach is to establish regional committees comprised of representatives from the industry, the academic community and the banking agencies. The role of these committees would be to evaluate levels of risk present in their respective areas and to anticipate competitive and economic developments that will concern the industry. Some of these issues currently are evaluated in varying degrees by trade organizations, but better coordination and a more formalized approach would be beneficial.

Enforcement Actions

Background

The basic purposes of the examination function are to identify institutions that pose a greater risk of loss to the insurance fund and, therefore, require special supervisory attention, and to correct problems before risk to the fund becomes a loss to the fund. Banks assigned a composite "4" or "5" rating under UFIRS¹ are defined to be problems. Because the FDIC insures deposits in virtually all commercial and savings banks, its problem list includes national banks, state member banks, savings banks and state nonmember banks. Problem banks generally are subject to some type of enforcement action, more frequent examinations and other regular communication or visits in order to verify adherence to agreements, evaluate the effectiveness of those actions, and otherwise maintain some control over bank management.

Over the past several years the number of problem banks has grown substantially. From a low of 223 at the end of 1981, the list reached an historical high of 1,624 in mid-1987. Since then, the number gradually has declined to 1,415 at year-end 1988. That reduction has been due primarily to a record number of failures as well as to an improvement in the agricultural economy in the Midwest.

Historically, banks have become problem institutions as a result of poor lending decisions and mismanagement. While these root causes are still

evident today, economic problems related to the agriculture, energy and real-estate industries also have had a significant impact. On the positive side, problem banks resulting from economic rather than management problems often rebound fairly quickly when the economy improves.

Alternatives

When a bank's condition begins to deteriorate, the banking agencies have a number of options available to correct the problem. For example, examiners often meet with bank management and the board of directors to discuss the bank's performance. These informal discussions often are successful in correcting less-severe problems.

By the time a bank is assigned a "3" rating, the agencies generally require some form of written commitment from bank management to take specific corrective actions. These agreements take different forms but frequently are memoranda of understanding (MOU) or board resolutions, both of which are considered informal administrative vehicles. Use of a board resolution or an MOU, as opposed to a more formal action, is appropriate when the agency believes that the problems are recognized by management and there is confidence in management's intention to make a good-faith effort to eliminate them. While resolutions and MOU's may lack legal enforceability, failure to comply with commitments or continued deterioration in the bank's condition may be the basis for a more formal action.

Under Section 8 of the FDI Act, for example, the FDIC has authority to terminate insurance and issue cease-and-desist actions.² It can suspend or remove a bank officer or director or prohibit participation by others in a bank's affairs when certain conditions are met. The agencies also can impose fines on banks or bankers for failure to comply with cease-and-desist orders or certain rules and regulations.

The system of problem-bank identification, combined with aggressive supervision of these institutions and timely enforcement efforts, has prevented numerous failures. Banks with severe problems may fail, but many others are able to resolve their problems, as evidenced by the considerable turnover of institutions on the problem list. For example, since December 31, 1987, when there were 1,575 problem banks, 470 banks have been added to the list while 632 institutions have been deleted, thus leaving a total of 1,413 as of November 30, 1988. Of the 632 deleted, 159 were the result of closings or FDIC assistance, 67 were the result of mergers and 406 were the result of improvement.

Recommendations for Improving Enforcement and Supervision

6. The process for terminating federal deposit insurance should be streamlined to a time period of no more than six months, and the basis for initiating termination procedures should be expanded.

Under Section 8(a) of the FDI Act, insurance can be terminated when a bank engages or has engaged in unsafe and unsound practices, violates laws or regulations to which it is subject, violates an applicable order or written

agreement entered into with the FDIC, or is proven to be in an unsafe or unsound condition. Due process and time to eliminate the unsafe conditions are provided to the bank under the law.

While insurance termination can be a powerful enforcement tool, its effectiveness is greatly reduced by the extended implementation process which can take two years or more to complete. Although the statutory language does not require it, the practical result of this cumbersome and costly process is that Section 8(a) actions generally are initiated only when other available administrative remedies have proven unsuccessful or the bank is in an extremely unsafe or unsound condition.

Two issues must be resolved to make Section 8(a) authority a more effective enforcement tool. First, the process must be streamlined so that the FDIC has the ability to handle high-risk situations promptly. A time frame of no more than six months seems reasonable and is recommended. Such a change would better enable the FDIC to minimize its financial exposure and not let losses accumulate.

Second, given that the FDIC lacks the broad range of enforcement authority over national and state member banks, insurance removal needs to be activated before a bank deteriorates to a point where it is in an unsafe and unsound condition. Some might suggest that the FDIC should have the full range of enforcement powers over all insured banks. However, the FDIC's real interest is only for those occasions when it believes the insurance fund is unreasonably exposed and its interests are not being adequately addressed. Broader Section 8(a) authority would satisfy that need.

Implementation of these recommendations would mean that if a bank in a high-risk situation did not take the corrective action required, its insurance could be terminated within the six-months' limit. If the situation is not considered an immediate danger and the bank has a corrective plan, termination proceedings could be suspended for a specified period of time to allow the bank to make corrections. If the corrections were not made, the termination proceedings could be reactivated without starting the process over.

The FDIC should not be required to assume whatever risk a bank may undertake simply because the bank is in no immediate danger of failing. If a bank's behavior or activities represent an unacceptable level of risk, the FDIC should have the right and ability to protect the fund. It is not anticipated that insurance termination actions would be frequent, and in all cases they would be closely coordinated with the bank's primary supervisor(s). Nevertheless, it is important that the agency bearing the ultimate financial risk have the ability to control that risk. Finally, as with the present law, existing depositors would continue to be insured for a reasonable period after a bank's insurance termination was final.

7. Capital requirements should be rewritten to provide regulators the option to impose immediate activity restrictions on banks with capital levels below minimum standards.

One of the best ways for the industry and the banking agencies to respond to the varied and complex changes in banking is to strengthen the industry's natural shock absorber--capital--while at the same time creating disincentives for excessive risk-taking. Owners of banks who stand to gain from the success of an institution should have enough of their own capital at

risk so that they stand to lose if the institution fails. Recent events, especially in the S&L industry, clearly have shown that without adequate capital there are strong incentives for excessive risk-taking at federally insured institutions.

Well-capitalized institutions are better able to adjust to a changing environment and to take advantage of opportunities as they arise. But even more important from a deposit insurer's viewpoint, well-capitalized institutions are better able to absorb losses, instill public confidence, support reasonable growth while restraining imprudent growth, and cushion the insurer and uninsured creditors in a threatened insolvency. However, given the federal safety net which frequently acts to protect all creditors, market incentives for increasing capital are not as strong as they might otherwise be. Further, reluctance to dilute stockholder interests acts as a disincentive to management in raising capital. Consequently, maintenance of adequate capital relies to a significant degree on supervisory oversight. The present capital regulations and the anticipated implementation of a risk-based capital measure designed to encourage the industry to maintain adequate capital positions are examples of that oversight.

Under the existing regulations, no immediate serious penalties exist when an institution's primary capital ratio falls below a safe level.³ Enforcement must rely on tools such as a capital directive, cease-and-desist order or termination of insurance proceeding. Implementation of these may well be delayed by a protracted adversarial debate before a judge, while the bank continues to operate in its unsafe condition.

A better alternative for increasing incentives for banks to maintain adequate capital and to protect the insurance fund would be to statutorily provide the insurer, working with the other regulators, with the option to impose immediate conditions on banking operations as soon as capital falls below acceptable levels. Whether imposition of any conditions is appropriate and which conditions to impose would be left to judgment based on the facts and circumstances of each case. They could include, for example, suspension of dividends, restrictions on growth, or prohibitions on acquisitions and the exercise of nontraditional powers. Such restrictions would end when capital was restored to acceptable levels. Moreover, when conditions exist where the sale of additional equity is the only acceptable alternative for restoring capital within a reasonable time period, regulators should have authority to force the sale of new capital regardless of any diluting effect the necessary price may have on shareholders.

8. To minimize losses to the insurance fund, chartering agencies should merge or place a bank into receivership no later than when its shareholders' equity capital is exhausted.

Insolvency can take on several meanings. In business, it generally refers to a situation when a firm is unable to meet its obligations as they come due. In economics, it may refer to a situation in which the market value of a firm's liabilities exceeds the market value of its assets. In accounting, insolvency may mean that the book value of liabilities exceeds the book value of assets. In banking, the chartering agency determines when an institution is insolvent or otherwise subject to failure, and at that point can close the institution. For national banks, the OCC has that authority.

For state banks, the state that issued the bank charter has the authority to close the bank.

Under the present system, a failed bank should be closed no later than at the point when the owners' capital is exhausted. Assets then would have sufficient value to cover liabilities and neither the FDIC nor other creditors would suffer losses. Unfortunately, no one has such precise measurements.

Because the chartering agency and not the deposit insurer has authority to declare an institution insolvent, there may be differing incentives as to when an institution should be closed. The insurer usually will want earlier action, but the chartering agency may have practical reasons for delaying closings. These reasons might include the impact on the local economy, political factors, or some feeling of allegiance to a bank it chartered. Charterers also are seen as having some obligation to promote their segment of the banking industry. In the meantime, the FDIC assumes any additional costs associated with a delayed closing.

These disincentives to close a bank and the obvious problem of determining just when the point of insolvency is reached mean that banks typically are closed only when capital is in a deficit position, i.e., the value of assets is less than total liabilities. Based on the losses suffered by the FDIC over the past several years, and particularly the deep discounts received on sales of assets in many recent failed-bank cases, there is a case to be made that the point of insolvency has been badly misjudged.

For supervisory purposes, bank capital has included the valuation reserve for anticipated loan losses. However, banks normally fail due to excessive loan losses and it makes little sense to consider a bank solvent if its only remaining capital consists of a reserve set aside to absorb losses that are believed to already exist, even though the exact amount of loss on specific credits may not have been identified. The FDIC believes that regulators should ensure that loan reserves are maintained at an adequate level and that chartering authorities should declare banks insolvent (close them) when their equity capital, excluding loan reserves, is depleted.

The Applications Process

Background

The first line of defense in controlling insurance risk is through the applications process, i.e., by controlling who is to be insured and in what kinds of activities they can engage. By statute, the FDIC is charged with the responsibility of acting upon properly completed applications for deposit insurance by state nonmember banks or banks which will become state nonmember banks at the time insurance becomes effective. Deposit insurance for national banks and state member banks is granted automatically under the same standards used by the FDIC for state nonmember banks upon certification by the OCC or the Federal Reserve.

Any applicant has the right to apply for deposit insurance and to obtain full consideration of its application in light of all relevant facts

and without prejudice. The factors to be considered are: (1) the financial history and condition of the bank; (2) the adequacy of its capital structure; (3) its future earnings prospects; (4) the general character of its management; (5) the convenience and needs of the community to be served by the bank; and (6) whether its corporate powers are consistent with the purposes of the FDI Act (12 U.S.C. 1816). If all six factors and considerations required by the National Historic Preservation Act, the National Environmental Policy Act of 1969, and the Community Reinvestment Act are favorably resolved, the applicant is entitled to receive deposit insurance. In evaluating these applications, the agencies may conduct examinations and/or investigations to develop essential information and to protect against unwarranted risk.

The granting of deposit insurance confers a valuable status on an applicant. Conversely, a denial may have serious adverse competitive consequences, and for a new bank essentially may preclude its entrance into the banking business. Thus, a comprehensive review of the applications for a charter and deposit insurance can be an effective way to ensure that new banks and existing uninsured banks have the best possible chance of operating in a safe-and-sound manner.

Section 18(c) of the FDI Act provides for approval by the respective agency of mergers that do not result in a monopoly or further any combination or conspiracy to monopolize, or attempt to monopolize the banking business in any part of the United States. Approval may be withheld if the transaction is expected to substantially lessen competition, create a monopoly, or in any other manner restrain trade, unless the anticompetitive effects of the proposed transaction are clearly outweighed in the public interest by the

probable effect of the transaction in meeting the convenience and needs of the community to be served.

In evaluating merger applications the banking agencies must consider: (a) the effect of the transaction upon competition; (b) the convenience and needs of the community to be served; (c) the financial and managerial resources of the merging banks; and (d) the future prospects of the resulting entity, including its probable earnings performance.

Another area in which the applications process is used to control the risk posed by new entrants to the system is through the authority to disapprove changes in control. Any person seeking to acquire control of an insured bank is required to provide notice to the appropriate federal agency. The FDIC or respective agency assesses anticompetitive or monopolistic effects of the proposed acquisition, determines the financial strength of the acquiring party, and determines whether the levels of competence, experience and integrity of the acquiring party or any of the proposed management personnel are adequate to protect the interests of the depositor or the public.

Another important element in controlling risk and maintaining the integrity of the banking system is the quality of the people who direct and manage banks. To help ensure high standards in banking, Section 19 of the FDI Act provides that, unless the FDIC gives its consent, no person shall serve as a director, officer or employee of an insured bank who has been convicted of any criminal offense involving dishonesty or breach of trust.

In sum, the applications process, specifically those portions providing review of new entry, helps control risk in the industry through the approval of only qualified deposit insurance applicants and by ensuring that individuals who direct and manage banks are worthy of the public trust.

Recommendations for Controlling Risk Through the Applications Process

Although the banking agencies have been reasonably successful in controlling certain types of risk through the applications process, that process continually must be reviewed and updated to ensure that reasonable safeguards are in place. With this in mind, the following recommendations address the applications process.

9. The six factors required by law to be considered before deposit insurance is granted should be expanded to include the risk to the FDIC fund. For banks granted deposit insurance without specific FDIC approval, the FDIC should receive written certification and supporting analysis that all seven factors were favorably resolved.

The FDIC presently has authority to act only on applications for deposit insurance by institutions that will become state nonmember banks. Each application must be evaluated according to the six factors described above. The OCC and the Federal Reserve have the responsibility for granting FDIC insurance to national and state member banks, respectively. Section 4(b) of the FDI Act requires the OCC and the Federal Reserve to consider the same six factors and to notify the FDIC of their action as part of the process for obtaining a national bank charter or becoming a member of the Federal Reserve System, respectively. The FDIC has no authority to object or even to offer

comment, and receives no information to document whether the six factors or the potential impact on the deposit insurance fund were considered.

Because the FDIC ultimately assumes the risk for institutions granted deposit insurance, and absent the authority to rule on all entries to the insurance safety net, the agency granting insurance should be required to specifically address the risk to the FDIC's fund in its decision. In the interest of having some control over the risk it assumes, the FDIC should have an opportunity to review and comment upon the decisions and the supporting analysis. The FDIC fully expects such authority to be exercised in a spirit of cooperation and coordination among the agencies.

10. The FDIC should receive prior notification of intent from any insured bank that intends to engage in "nontraditional" banking activities.

National banks must file a prior notice with the OCC if they intend to conduct any activities in a subsidiary of the bank. Bank holding companies must file a notice or application with the Federal Reserve if they intend to conduct permissible nonbanking activities, directly or through a subsidiary, including banks and their subsidiaries.

There is no requirement that the FDIC be informed of such events, even though they could materially change the insurance-risk profile of the bank. There also is no existing requirement that state nonmember banks, supervised by the FDIC, notify or apply to the FDIC before engaging in a new activity, whether in the bank or through a bank subsidiary.

We have discussed the necessary movement toward prospective examinations--the need to know what is happening on a continuing basis, and to anticipate and prevent problems. We also have noted the rapid evolution of banking, including new powers, products and areas of endeavor, many of which have the potential to greatly increase risk to the FDIC. In order to provide effective supervision and to control risk, the FDIC needs to have knowledge of significant changes in activities in order to influence a bank's plans when they would significantly change the nature and risk profile of its operations. At the same time, we do not want to assume the responsibilities of management or to be overly intrusive in a bank's planning process.

While the need is obvious and real, implementing such a proposal raises several questions. For purposes of discussion, consider the following possibilities.

For national and state member banks, we would ask that when the OCC or the Federal Reserve receive notification or application under their regulations they immediately share the information with the FDIC. This would be part of the routine cooperation necessary among the regulators.

For state nonmember banks supervised directly by the FDIC, prior notification is suggested for material changes. For the formation of bank subsidiaries and for acquisitions of going concerns that would engage in nontraditional banking activities, the concepts outlined in Mandate for Change are appropriate. Initially, the FDIC would want prior notice of all such transactions. If legislation is adopted to limit transactions between a bank and its subsidiaries, the definition of a "material" change might be based on

the potential impact on capital. That is, a subsidiary should be adequately capitalized to stand and operate on its own, and finance itself independently from the bank. If it is, the bank's investment in the subsidiary could be deducted when evaluating bank capital adequacy. If this adjustment results in bank capital that is less than supervisory requirements, prior notification would be required. If bank capital remains adequate after adjustment, then prior notification would be encouraged, but not mandated. Notification also would be needed if a bank intended to materially increase its investment in an existing subsidiary.

For nontraditional banking activities that are to be conducted within the bank, the criteria for prior notification are more difficult to determine. Our normal supervisory activities can be expected to discover new activities being conducted in the bank. However, even with more emphasis on prospective supervision there will be time lags between initiation of an activity and its discovery and review by supervisors. Another of the principles for expansion of powers discussed in Mandate for Change was that the banking agencies should have the power to determine what activities are appropriate to be conducted within the bank. Other activities must be conducted in a separately capitalized subsidiary or affiliate, insulated from the bank. If such activities, regardless of materiality concerns, are to be conducted within the bank, the FDIC should receive prior notification.

As to the question of what constitutes nontraditional banking activities, the list of permissible activities for bank holding companies under the Bank Holding Company Act is a reasonable interim working definition until the question of expanded bank powers is addressed by Congress.

11. Banks should be required to provide prior notice of intent to accept brokered deposits or to use other similar special fund-gathering mechanisms.

The FDIC does not favor limitations unduly hampering legitimate use of brokered deposits or similar funding methods. Instead, a more focused supervisory approach on potential abuses of these funds is preferred. The FDIC believes it is proper to require banks to provide prior notice of intent to solicit or accept brokered deposits or to engage in other unusual funding programs if they are expected to produce a growth in liabilities exceeding some given percentage in a 30-day period. Prior notice, as opposed to after-the-fact monitoring, is necessary because of the irreparable harm that can be done. Funding by itself is not the problem so much as what the bank does with the funds. Once funds are acquired, after-the-fact supervision does not easily allow for disposal of unsatisfactory assets. The notice to the federal supervisor would be expected to include a plan for the use and terms of the funding.

Conclusions

The success of the federal deposit insurance program is evidence that the supervisory program followed by the banking agencies generally has been effective. But, it also can be said that over the past several years defects have become apparent which need to be addressed. Some have argued, for example, that the banking agencies should have recognized the potential problems in the Southwest sooner so that the fall in oil prices would not have had such a devastating effect. Others have argued that even when problems

were recognized, the banking agencies failed to respond quickly or forcefully enough to contain them.

Recently, some observers also have been highly critical of certain state legislatures for being overly aggressive in promoting deregulation. But blaming deregulation for the problems that exist in some sections of the country or because a few banks have misused powers misses the point. The real problem is deregulation without sufficiently strong supervision. That is a formula for disaster that must be avoided.

In this chapter, changes to the banking environment and the supervisory program have been outlined. We have set forth and discussed a series of recommendations for improving supervision from the perspective of the insurer. All of this is done to answer the fundamental question facing the banking agencies: Is it possible to effectively control risk through strong supervision? The FDIC believes it is possible.

FOOTNOTES

¹UFIRS stands for the Uniform Financial Institutions Rating System which was adopted by the Federal Reserve, the OCC, the FDIC, the FHLBB and the NCUA in 1979.

²The Section 8 formal enforcement actions currently available to the FDIC are summarized in the Appendix to this chapter.

³FDIC Regulation 325 presently defines a ratio of below three percent to be prima facie unsafe and unsound.

APPENDIX: FORMAL ADMINISTRATIVE ACTIONS

The Board of Directors of the FDIC has been given broad enforcement powers under Section 8 of the FDI Act. These powers include:

Section 8(a) - Termination of Insurance--The most severe sanction available to the FDIC is the termination of a bank's insurance (national banks, federal savings banks and many state banks are not permitted to operate without federal deposit insurance). Insurance termination may be used when the FDIC determines that a bank is in an unsafe or unsound condition; is engaging in unsafe and unsound practices; or has violated a law or regulation. In practice, insurance termination is generally reserved for banks whose financial condition has seriously deteriorated and other efforts to obtain correction have failed.

Section 8(b) - Cease-and-Desist Proceedings--Permits the FDIC to order a state nonmember insured bank and its directors, officers, employees, and agents to cease and desist from unsafe or unsound practices and violations and to take affirmative action to correct the condition resulting therefrom.

Section 8(c) - Temporary Cease-and-Desist Proceedings--Provides that the FDIC may issue a Temporary Cease-and-Desist Order against a state nonmember bank whenever the FDIC determines the violation or threatened violations or unsafe or unsound practices are likely to cause insolvency or substantial dissipation of assets or earnings of the bank, or otherwise seriously prejudice the interests of the depositors prior to the completion of action under Section 8(b).

Section 8(e) - Removal Procedures--Gives the FDIC the power to remove a director, officer, or other person participating in the conduct of the affairs of a state nonmember bank under certain specified circumstances.

Section 8(g) - Suspension Procedures--Permits the FDIC to suspend any director, officer, or other person participating in the conduct of the affairs of a state nonmember bank if such person is indicted for a felony involving personal dishonesty or breach of trust.

Section 8(i) - Civil Money Penalties--Gives the FDIC the authority to prospectively assess civil money penalties against state nonmember banks and individuals for violations of cease-and-desist orders and certain other statutes and regulations.

Chapter 6

FORBEARANCE

Forbearance, or more specifically supervisory forbearance applied to federally insured depository institutions, is broadly defined for the purpose of this discussion. Forbearance is any program or set of procedures whereby supervisory restraint is exercised toward an insured depository institution that fails to meet established safety-and-soundness criteria. Such forbearance may be either formal or informal, and may be applied to individual or to broad categories of financial institutions. Under this definition, supervisory forbearance is a deliberate and intentional policy choice; not merely the consequence of inaction, inability or unwillingness to address a particular high-risk situation.

Background

Tiered Supervisory Forbearance

Since the 1930s, a complex structure of "tiered" supervisory reactions to a given set of problems has evolved for use by the FDIC. These tiered responses are applied, on a case-by-case basis, depending upon the perceived severity or level of risk exposure posed in a particular situation. They also

can be imposed in a progressive series of escalating actions as may be deemed appropriate in order to lower risk levels and control losses arising from the actions of an insured institution.'

When supervisory enforcement mechanisms are applied only to the maximum extent necessary to address the specific level of risk exposure in each situation, this approach has proven to be quite effective in both reducing failures and limiting losses to the insurance fund. The FDIC takes pride in this success and in the fact that this generally can be accomplished without unduly interfering in the management decisions or operation of individual financial firms. The key ingredient is to have the independence and flexibility to impose the optimum level of pressure needed to achieve the desired risk reduction. The manner in which the institution's management accomplishes this end is their choice so long as the FDIC's exposure level is lowered. Thus, risk-taking need not be prohibited or even tightly regulated; only held within manageable limits.

The simple fact is that most FDIC-insured depository institutions identified as posing a definite threat of loss to the insurance fund are successfully restored to a safe-and-sound operating condition and do not ultimately fail. Effective supervision, including the use of discretionary supervisory forbearance, has proven to be a very cost-effective loss prevention mechanism for the deposit insurance fund. In the one-year period ending June 30, 1988, for example, 181 FDIC-insured banks were closed or granted financial assistance. At the same time, however, almost one-third, or more than 500, of the 1,624 banks on the FDIC's problem bank list were removed

because of their substantially improved condition or their nonassisted merger into a sound financial institution.²

Exercising Supervisory Discretion

The most prevalent form of forbearance is the exercise of voluntary restraint in the application of the vast array of supervisory and enforcement mechanisms available to control risk in individual insured institutions. Over several decades it has evolved from an informal, largely undefined, practice into an important operating procedure with extensive guidelines for its application. The goal of this supervisory restraint is, of course, to achieve control over excessive risk exposure without having to resort to costly and time-consuming, court-imposed legal sanctions or more Draconian measures such as insurance termination proceedings.

The key to the discretionary exercise of such restraint by the FDIC is the rendering of an independent judgment about the institution's management; that is, its competence, its cooperativeness, its capacity to correct weaknesses and its ability to change any behavior perceived as being unduly risky or undesirable. That judgment is essentially a balancing of supervisory extremes. At one extreme, the supervisor could take action that can be expected to lead to the closure of what may well be a viable institution. The other extreme is that of inaction which can result in the complete disregard of unsafe and unsound operating practices. Both extremes are usually undesirable and, in virtually all instances, will increase the loss ultimately borne by the deposit insurance fund.³

The importance of this judgment being rendered independently of external, political or industry influence cannot be overemphasized. So long as independence and flexibility are retained by the supervisor, forbearance can be granted or not granted, based, at least in part, on fundamental safety-and-soundness criteria and for the purpose of managing risk. This ability to operate with independence from external considerations is essential if the deposit insurance fund is to be effectively protected against unnecessary loss.

An excellent case can be made that exercising forbearance in supervisory matters is quite often in the deposit insurer's own self-interest. This assumes, of course, that the primary purpose of supervision is to promote systemic stability and achieve the safe-and-sound operation of financial institutions, rather than to punish undesirable behavior. Given the discretion to apply forbearance for the purpose of managing risk, it is highly likely that the supervisor will (in the absence of fraud or mismanagement) almost always choose such a course of action, at least as the most expedient initial approach.

Correction of weaknesses at an early stage is the deposit insurance fund's equivalent to the risk-control measures taken by many private-sector insurance firms in an attempt to lower potential liability claims and avoid losses. As in the private sector, the supervisors of financial institutions have found that reduction of risk through early correction of weaknesses is cheaper and less disruptive than waiting for losses to develop. It is, therefore, a far more desirable course of action. Simply put, a financial institution that has been restored to a safe-and-sound operating condition no longer poses an unacceptable risk of loss to the deposit insurance fund.

Congressionally Inspired and Mandated Forbearance

In recent years, the Congress has mandated specific supervisory restraints aimed at shielding a large number of commercial banks and thrifts from the more severe federal supervisory actions. These individual forbearance programs, when enacted into law, have taken several different forms. Some of the programs have provided valuable time for weakened private-sector firms to work through their difficulties, recoup short-term losses and restructure. All too often, however, forbearance programs have been enacted with the primary aim of preserving specific types of institutions in specific markets. Other programs, such as the FDIC's Income Maintenance and Capital Forbearance Programs, were voluntarily developed, at least in part, in anticipation of Congressional action which might have proven to be less flexible in its approach. The granting of forbearance of any kind, however, may interfere with normal market mechanisms. It often has created competitive inequalities and may, or may not, increase the deposit insurance fund's exposure to loss.

In the last decade, supervisory forbearance increasingly has been made available to depository institutions that have been adversely impacted by natural catastrophe, economic trends or some other external shock. The key consideration for granting forbearance has been that such events were generally considered to be beyond the control of the institution's management and of relatively short duration. This forbearance has been legislated as a temporary measure and made available to relatively large numbers of institutions adversely impacted by external events.

The group of financial institutions so categorized usually has been homogenous, in that they operate in a particular geographic area or with similar investment characteristics. Also, the problems that prompted the Congressional action were widespread and concern had been raised that the banking public might view a large number of failures among the group as a regional or national calamity. Recent examples of groups receiving broad-based supervisory forbearance include thrift institutions impacted by high and volatile interest rates in the late 1970s and early 1980s and agricultural-based lending institutions impacted by the more recent sustained downturn in the agricultural sector.

It is the view of the FDIC that the primary goal of such forbearance, like other forms of supervisory restraint, should be the management and reduction of excessive risk-exposure levels. This favorable result often can be achieved by permitting well-managed, viable institutions some reasonable period of time to recover from a weakened, but not insolvent, condition caused by a sudden unexpected shock.⁴ Once again, however, it is the independence and discretion in granting supervisory restraint, and the ability to deny forbearance to specific very high-risk institutions, that determine its potential for success in limiting loss to the insurance fund.

FDIC Experience with Forbearance Programs

Agricultural Loan-Loss Amortization Program

During the mid-1980s, many areas of the United States experienced a protracted downturn in agricultural activity that adversely impacted both

the agricultural sector and many related businesses, including financial institutions. Particularly hard hit were agricultural creditors whose increased inability to collect contractual debt led to increased numbers of bank failures.

The Congress, seeking to offer some form of relief for beleaguered agricultural creditors, debated a variety of possible measures. These concerns were addressed, indirectly, under Title VII of the Competitive Equality Banking Act of 1987. This legislation permitted banks serving predominately agricultural customers to defer accounting recognition (for reporting purposes) of agricultural-related loan losses. Instead of prompt loss recognition, banks were authorized to amortize such losses over succeeding years.

The new legislation applied only to institutions of less than \$100 million in total assets which had at least 25 percent of their total loans in qualified agricultural credits. The banking agencies were charged with developing and implementing appropriate regulations within a 90-day period after enactment. Effective October 27, 1987, the FDIC implemented its agricultural loan-loss amortization program. Similar programs also were adopted by the OCC and the Federal Reserve.

From the program's inception through September 30, 1988, the FDIC received 73 formal requests for consent to defer agricultural loan losses under this program. As of that date, there were 32 institutions, located in eleven midwestern, southern and southwestern states, which had been approved for participation.⁵ While the approval rate may seem quite low, in fact,

only 14 of the applications have been denied; the remainder are still pending or under review. The focus of the review process has been on judging the management's ability to develop and implement a realistic capital augmentation plan aimed at ensuring the institution's future viability.⁶

It was the clear intent of the Congress that losses sustained as a consequence of fraud or criminal abuse fall outside of the scope of the program. The enabling legislation also required the submission of a plan aimed at restoring the bank's capital to an acceptable level as an essential condition of eligibility. Banks that have experienced capital declines, but which still have an acceptable level of capital, cannot elect to be included in the program unless there is a reasonable expectation of further capital erosion.⁷ The capital plan also must be based upon reasonable, realistic projections that take into consideration the institution's earnings, local market conditions and other material facts.

Inherent in these criteria is a "viability" test for all institutions seeking supervisory forbearance. In order to gain approval for admission to the loan-loss amortization program, the applicant bank must be judged to be economically viable and fundamentally sound, except for the need for additional capital to carry existing weak agricultural credits.

Thus, a "reasonable prospect of future viability" standard is at the heart of the program. This standard cannot be uncoupled or compromised in the program's actual implementation without substantially changing the risk equation. Otherwise, the deposit insurance fund would be greatly hampered in its efforts to control its risk exposure and to limit its potential loss.

The Congressional intent, the FDIC's goals and the banking industry's interests appear to be in harmony on this important point. For example, the legislative history of the implementing legislation indicates that the agricultural loan-loss deferral program was intended to allow "fundamentally sound banks to weather (the current) storm."⁸ There is no indication of any intent to artificially sustain institutions that are clearly insolvent or that are not viable over a reasonable time horizon.

Viability was not defined by the legislation and a rigid definition is intentionally excluded from the subsequent regulations which were adopted. Thus, like most supervisory decisions made by the banking agencies, it is a judgment based on available information tempered by traditional practice. Such judgments focus on variables such as the current financial condition, future earnings potential and available funding sources.

In this sense, viability is an economic concept independent of the management factor. If an institution is not viable, given a reasonable set of economic assumptions, then even the best, most astute and dedicated, management team cannot turn the situation around and losses will only increase. Thus, the FDIC has adopted a posture that essentially requires that an applicant have a reasonable prospect of remaining a "going concern" throughout the entire program and a good probability of returning to healthy operation before the end of the forbearance period.

There is a long tradition of imposing similar criteria (plus an assessment of the management) in judging requests for bank and thrift charters, the granting of deposit insurance protection, and most mergers,

acquisitions or other expansion proposals. The approval or denial of forbearance requests, under this and similar programs, generally is consistent with traditional operating and statutory practices. In fact, several landmark pieces of banking legislation, spanning several decades, have used almost identical language in setting forth these fundamental safety-and-soundness considerations.⁹

The eligibility criteria established by the FDIC for granting consent to insured banks to defer agricultural loan losses are relatively simple, but have proven to be quite effective. First, they have provided temporary comfort for many small banks and, thus, indirectly helped agricultural creditors in rural communities. Second, while individual institutions have been subjected to close supervisory oversight, there has not been significant interference in the day-to-day operating decisions. Crucial, however, is the fact that this has been accomplished without structurally weakening the banks involved or increasing the risk of loss to the deposit insurance fund.¹⁰

The FDIC has opposed one aspect of the loan-loss amortization program: namely, the deviation from normal accounting practices. As a bank supervisor and insurance agency, the FDIC is reluctant to embrace any program that hides or obfuscates the actual results of an institution's operation. The mere fact that the agricultural losses are not disclosed, per se, does not alter the fact that such losses exist. The FDIC believes that a cleaner and more forthright approach is to adhere consistently to traditional accounting practices and, when material losses are in evidence, then make the choice to grant or not to grant supervisory forbearance.

Capital Forbearance Program

In March 1986, the FDIC instituted a temporary capital forbearance program for the benefit of insured banks weakened as a consequence of their lending to the troubled agricultural and energy sectors. This program was developed and in operation before Congressional action on the agricultural loan-loss deferral program and attempted to address many of the same concerns. Because it was developed primarily by bank supervisors, its provisions and implementation were consistent with traditional approaches and it contained a strong "safety-and-soundness" focus. Perhaps, it even may have had some influence on the supervisory flexibility built into the subsequent legislation authorizing agricultural loan-loss deferral.

In the initial stages, participation was limited, in large measure, because the application process was somewhat cumbersome and a fixed minimum capital ratio was established as a criterion for acceptance. The program was substantially revised in July 1987. It was extended to January 1995, and made available to all FDIC-insured banks that were experiencing financial difficulty due to underlying economic conditions beyond their control.

Like the agricultural loan-loss deferral program, the FDIC capital forbearance plan was aimed at banks with inadequate capital. The programs are quite specific on this point. The capital deficiency must be the result of adverse economic conditions rather than the consequence of losses arising from poor lending decisions by bank management. While the loan-loss amortization program is limited, by statute, to agricultural loan losses in small agriculturally oriented banks, the FDIC capital forbearance program is

available to any insured bank meeting the relatively broad criteria. As with the mandated loan-loss amortization program, reasonable recapitalization plans and a future viability standard of the institution are keystones of the program.

The acceptance of and participation in this broader capital forbearance program have been noticeably greater than the Congressionally mandated loss deferral plan. From inception in March 1986 through September 30, 1988, a total of 291 applications have been made to the FDIC by insured banks seeking forbearance from normal supervisory capital standards. Of these, 176 have been approved. The denial rate has run at about 25-30 percent of those submitted. Denial has been for the same primary reason as with the loan-loss deferral program; that is, failure of the institution's management to convince the FDIC that they can, over time, augment the capital structure and become a viable, profitable entity.

A total of 134 capital maintenance plans are in place in 13 midwestern and southwestern states as of September 30, 1988.¹¹ Unlike the record with the agricultural loan-loss deferral program, however, there have been 34 terminations of participation in the capital forbearance program. The reasons for termination include seven because of the closing of the bank, another seven as a result of significantly improved financial condition and ten due to charter conversion or merger into another institution.

Forbearance Practices for FDIC-Insured Thrifts

During the late 1970s and early 1980s, many mutual savings banks and other thrift institutions experienced a significant diminution of their capitalization or net worth cushion. This was, in large part, as a consequence of the sustained period of high and volatile interest rates coupled with an erosion of traditional funding sources. An accelerating inflation rate in 1978, and a monetary-policy shift in the following year, led to an almost continuous rise in interest rates through early 1980. Interest rates remained at or near record levels for several years.¹²

At this same time, interest-rate ceilings on time deposits and restrictions on the payment of interest on transactions accounts were still in place. With an extreme inflationary spiral, the resulting disintermediation severely impacted both commercial banks and thrifts, as small savers became increasingly yield-sensitive. This was particularly the case for FDIC-insured institutions competing in large eastern urban markets where new forms of financial intermediaries such as money market mutual funds emerged as significant competitors, capturing billions of dollars of former bank and thrift deposits.

The situation was further exacerbated by the limited investment flexibility available to some thrifts under their governing statutes, which varied widely by individual state. Relative to commercial banking powers, thrifts were generally, but not always, subject to greater restrictions. Some thrifts, like those operating in New York state, also were subject to deposit-based "franchise taxes" which were payable to the state whether or not

the institution was profitable. Many of these restrictions resulted in an additional drain on savings bank capitalization. In extreme cases, these restrictions substantially increased the potential loss to the deposit insurance fund.

Many in the industry and elsewhere believed that the losses and increased risk exposure of the thrift institutions was a temporary, cyclical problem, attributable to the then-current hostile business environment. Such events, it was voiced, were beyond the control of thrift institutions' management. Further, the mandated public-policy responsibility of savings banks and other thrifts to provide home mortgage lending had been a driving force in the financial structure of many of these institutions and was now contributing to their current difficulty. At least one experienced Washington legislator believed that "Thrift institutions . . . (had) fulfilled their public responsibilities too well by providing a stable source of low-cost, long-term financing to the home mortgage market."¹³

These structural factors proved to be a significant weakness that was further aggravated by the impact of the unfavorable economic environment and restrictive investment constraints. By early 1982, the aggregate losses experienced by FDIC-insured savings banks reached \$2 billion annually. Some of the weaker institutions in New York City were experiencing losses at an annual rate of 3.5 percent of assets.¹⁴

Income Maintenance Agreements

The difficulty experienced by the thrift industry presented a unique situation and new challenges to the FDIC. Unlike most previous concerns with weakened depository institutions in its then 49-year history, asset quality was not the primary problem. In virtually all troubled savings banks at the time, the overall quality of the assets from a credit-risk perspective was excellent, if not spotless. In fact, asset quality was generally higher in FDIC-insured thrifts than in most commercial banks. Yet, many very large institutions faced "insolvency" as the market value of their assets rapidly dropped to some 25 to 30 percent below outstanding liabilities on any given business day. This could have resulted in enormous losses to the FDIC and, in fact, did represent a major multibillion-dollar potential claim on the FDIC's capabilities and resources at the time.¹⁵

The course of action chosen by the FDIC was to directly address the problem by forcing the weaker thrift institutions to merge into healthier banks or thrifts. The quid pro quo, to entice a potential merger partner, was the offer of a "floor" or guarantee of a market rate of return on the acquired assets through the use of Income Maintenance Agreements. Essentially, the FDIC agreed to pay the assuming institution the difference between the yield on acquired "earning" assets (primarily mortgages and securities) and the average cost of funds to savings banks. The agreements, however, were structured so that such interest-rate protection was not just one-sided. In the event rates declined, these savings banks would be required to make payments to the FDIC.

The time frame for protection under the Income Maintenance Agreements was negotiable, but typically ran for several years. As sophistication grew with experience, the FDIC was able to better segment the existing asset base and make more realistic prepayment assumptions. Successful bidders for a weakened thrift would be paid the spread between defined asset yields and the cost of funds, whether they subsequently chose to hold or sell the thrift's assets.

What the FDIC sought to achieve was a permanent solution to the savings bank problem at a reasonable cost to the deposit insurance fund without raising public concern over systemic stability. The primary criteria in making individual decisions, however, were that the resulting institution must be "financially sound, with the ability to compete effectively in its market, and would (be able to) continue to serve . . . its community free of excessive government control."¹⁶ Thus, the keystone of this early forbearance program was a form of "viability" standard, arrived at independently of considerations regarding the potential impact on the structure of savings banks or the thrift industry.

Between 1981 and early 1983, Income Maintenance Agreements were utilized in nine of the 12 assisted mergers of troubled savings banks. It should be noted that these insolvent institutions did not technically "fail" and were not closed, per se; they were merged into operating firms. Depositors and general creditors, therefore, experienced no loss. Because these were mutual institutions there were no stockholders with a receivership interest. Subordinated note holders, generally through negotiation, received some, but diminished, value for their investment. The FDIC also insisted on

the removal of senior management and most of the trustees of acquired institutions. These "conditions" for the granting of forbearance mitigated, to some extent, the charges that the FDIC was supporting institutions whose management had failed to compete effectively in the market.

Net Worth Certificate Program

It was in this atmosphere that the Congress enacted the first extensive modern form of supervisory forbearance, called the Net Worth Certificate Program, as Title II of the Garn-St Germain Act of 1982. Under this Title, the FDIC was empowered to increase or maintain the capital of a qualified thrift institution by making periodic purchases of capital instruments to be known as "net worth certificates." The program was intended to "provide thrift institutions with additional time to restructure their portfolios and streamline their operating costs."¹⁷

The mechanics of the plan adopted by the FDIC called for eligible thrift institutions to receive promissory notes from the FDIC representing a portion of current-period losses in exchange for certificates which were to be considered as part of the institution's capital base for reporting and supervisory purposes. The purchases were made semiannually according to a formula based on book capital levels. While the enabling legislation granted broad authority to set capital levels, the FDIC established a working formula to purchase certificates equal to between 50 percent and 70 percent of the institution's net operating loss.

In no event did the FDIC purchase certificates in an amount which would raise the institution's capitalization level to more than three percent of total assets. On the other hand, such assistance was only provided to "book solvent" institutions with a positive level of capital funds as calculated by the FDIC. A "floor" was subsequently set for eligibility, equal to one-half of one percent or more of total assets.

As with the subsequent forbearance programs designed primarily for commercial banks, the FDIC established criteria, beyond the basic solvency and future viability tests, required to be met by all participants. The eligibility criteria included the development of a satisfactory business plan based on reasonable economic assumptions over realistic time parameters. The criteria for acceptance also specified the absence of significant insider dealing or abuse and the absence of speculative management activity. The FDIC also imposed a restrictive covenant requiring the institution to convert from mutual to stock form at the subsequent request of the FDIC. This was intended to be used only as an alternate means of soliciting new capitalization, and only if it should subsequently be needed.

After the first full year of the Program (December 1983), approximately \$377 million in certificates were outstanding. During 1985, that figure reached its highest level at more than \$700 million. A total of 29 weakened savings banks have participated in the program since 1982. The overwhelming majority of the participants have been mutual savings banks based in New York state and specifically those based in New York City. Net worth certificates also have been issued to savings banks in Oregon, New Jersey and Pennsylvania.

The Net Worth Certificate Program is scheduled to expire on October 13, 1991. There have been no requests for certificates since 1986, however. Retirements and reductions in outstanding certificates have occurred primarily as the result of subsequent merger transactions rather than as the result of the institution's return to profitability. The value of certificates currently outstanding (as of the semiannual period ending June 30, 1988) has dropped to \$296.9 million and the number of participants to only three.

FHLBB/FSLIC Forbearance Practices

The FHLBB and the FSLIC have broad statutory authority to effectively grant a number of forms of financial and economic assistance as a means of resolving pending failures of insured thrift institutions. The forms of assistance normally available include simple cash contributions, the use of interest-bearing capital notes, indemnifications against related potential claims by third parties, guarantees against losses on specific assets acquired and guarantees of minimum yields on low- and nonearning assets. These options are not mutually exclusive and may be used in whatever combination, within statutory and policy constraints, that makes the greatest sense to the FSLIC and the prospective purchaser. In addition, regulatory and supervisory forbearance programs may be implemented as appropriate to the individual circumstances.

FSLIC-Assisted Supervisory Mergers

Like the FDIC, when confronted with a failing institution, the FSLIC may choose to liquidate it by paying off the depositors, or the FSLIC may seek a relatively healthy merger partner to assume the failing institution's liabilities. Also like the FDIC, the FSLIC is prohibited from providing assistance that exceeds the cost of liquidating a failing institution. A management consignment program also has been instituted which is aimed at conserving the failing institution's assets while a supervisory merger is being negotiated. Before action is taken, the failing institution may enjoy almost total regulatory and supervisory forbearance from certain requirements such as maintaining a minimum net worth level.

The FSLIC has the ability to "sell" a failing savings and loan association to virtually anyone or any firm willing to assume the liabilities. It has done just this on several occasions after ascertaining what the "market" wanted in order to take on the problem. This form of negotiated regulatory forbearance contrasts sharply with the forms of supervisory forbearance discussed so far. As early as 1983, this was acknowledged by the FHLBB to be an effective means of creating "opportunities" that would reduce the cost of granting assistance to failing thrifts.¹⁸

When the purchasing firm has been a nonfinancial corporation, that firm generally has not been subjected by the FSLIC to regulatory limitations and restrictions on its nonfinancial activities. This is a notable, and potentially valuable, exemption from the limits faced by some holding companies. Also, it departs significantly from most other current forbearance

practices in that it has some degree of permanence. At least as a practical matter, it seems unlikely that the FHLBB would require divestiture of all nonfinancial operations as soon as the thrift achieves profitability. The example of National Steel Corporation, which acquired three failing thrift institutions in the early 1980s and then merged them into a single FSLIC-regulated unit, is an example of this practice.

The FHLBB and the FSLIC routinely grant other forms of "forbearances and exceptions" from the exercise of their normal regulatory and supervisory authority with regard to assisted acquisitions of failing S&Ls. This procedure has grown in scope and application and, with subsequent guidelines issued in 1984 and 1986, has become a rather complex, but quite "routine," operating practice. The current guidelines explicitly set forth the criteria used and the extent of forbearance that may be requested by a purchaser; that is, "standard forbearances that will be granted" and "forbearance that may be granted on a case-by-case basis" (emphasis added).¹⁹

Specifically, to encourage mergers of weak thrifts, the FSLIC will routinely grant forbearance from the exercise of its regulatory authority to enforce minimum net worth requirements when the net worth deficiencies are as a consequence of a supervisory merger. This may be granted for a period of up to five years. On a case-by-case basis, the FSLIC also may grant forbearance, again for up to five years, from the minimum reserves and net worth requirements. Also, forbearance may be granted from other matters such as certain liquidity deficiencies, investment limits on service corporations, limits on investments in business-related real estate, and from up to 50 percent of any previously imposed dividend limitations.²⁰

The apparent intent of these guidelines is that they will be applied only to supervisory mergers in which a seriously troubled thrift institution is to be acquired. They are not intended to help shore up weakened institutions that do not face imminent failure. It is obviously beneficial if such assisted acquisitions are made by financially strong individuals or an organization whose future viability is not in question, absent the transaction. Unlike the procedures generally used by the FDIC, however, the focus is on encouraging the new thrift acquisition, rather than on ensuring that the future viability of the resulting, combined firm is not in question. If the acquirer is not financially strong or does not make a substantial commitment of resources (including new capital), there is a very real potential that some of these transactions will create a larger problem for the FSLIC at some future date.

Cost and Valuation Issues

The routine negotiation of regulatory and supervisory forbearance raises issues with regard to the cost and valuation of such action. This can be viewed from the perspective of the deposit insurance agency granting forbearance and, also, from the perspective of the potential purchaser of a failing thrift making a rational business or investment judgment. The negotiation process for regulatory forbearance also raises questions as to the appropriate calculation, and the Congressional intent, of the statutory "cost test" which mandates liquidation and deposit payoff of insured financial institutions if no less costly alternative is found.

Logically, both the FDIC and the FSLIC share common goals in achieving cost-effective, permanent solutions when confronting failing depository institutions. Both insurance agencies can and do offer a variety of financial inducements, including direct financial assistance, in order to entice potential investors to take a financial stake and share in the risks associated with assuming the business of a failing institution. Both the FDIC and the FSLIC also have permitted depository institutions with seriously eroded capitalization to continue in operation while seeking a merger partner or new capital. The FSLIC, however, has created entirely new forms of regulatory forbearance, introducing an interesting new dimension and permanence to the negotiation process for assisting in acquiring troubled depository institutions.

Creating Value versus Creating New Risk

From the perspective of a potential purchaser of a failing thrift, the FSLIC is essentially marketing or "selling" specific forbearances as an integral part of a complex purchase-and-assumption transaction. The firm acquiring a failing thrift, which has negotiated for and received several forms of specifically tailored forbearance, has obviously gleaned value. It must, therefore, be assumed that the purchaser has placed a dollar price and accounting valuation on that noncash consideration, if only as a business necessity in evaluating the entire transaction as an investment opportunity.

In some cases, that value can be easily measured or priced. For example, assume that a firm has negotiated a relatively low capital commitment

(that is, forbearance from a supervisory or regulatory requirement for an injection of a substantial dollar amount of new capital) over several years. The cost of funding this and other possible levels of capital commitment can be measured and then compared with alternate investment vehicles. This includes a comparison with the costs of acquiring a healthy thrift of a similar size in a similar market. In other cases, the value of specific regulatory or supervisory forbearance may be contingent on other factors or events. Thus, it may be much more difficult to accurately price.

To the extent that such noncash considerations are accepted by a willing buyer as part of the negotiation with the FHLBB and the FSLIC, it may be assumed that value is being created. That value is "sold" to, and presumably enjoyed by, the purchaser. This can be of mutual benefit to the investor and the deposit insurance agency. The key question that must be asked, however, is whether or not an unacceptably greater level of risk is also created by such a process.

If the resulting depository institution is financially sound, well-managed, potentially profitable, and, above all, viable, then it can be argued that the risk of loss to the FSLIC insurance fund will have been significantly reduced. If this is not the case, however, negotiated regulatory and supervisory forbearance programs can exacerbate existing problems and substantially increase future losses to the insurance fund. Rather than creating value, the true result may be creating greater risk and a potential for greater loss.

Standards for Forbearance Programs

Defining Successful Forbearance Practices

The acceptance of supervisory forbearance by an insured depository institution carries with it a corresponding obligation to cease unsafe and unsound practices and curtail excessive risk-taking. Ideally, forbearance grants the receiving party valuable time to correct deficiencies and an opportunity to restore the institution to sound-and-profitable operation. If successful, the franchise to operate the institution will likely increase in value. The opportunity to reap such gain should have certain conditions and corresponding "costs."

First and foremost, the acceptance of forbearance should almost always require a clear change in the institution's policies and operating philosophy. If the problem is serious, the new focus must become one of institutional survival and improvement, rather than working for growth, profits, shareholder dividends or even expanded service to the community. This means that some independence will be lost and there will be chafing restrictions on, or at least close oversight of, the management's future actions.

Supervisory forbearance should not be used as an indirect government shield to support high-risk endeavors or to perpetuate weak management practices which contributed to the existing troubled status of the institution. Further, the FDIC believes that forbearance must not provide an opportunity for new expansion efforts or indirectly provide the financial

incentives for additional or greater risk-taking. Quite simply, supervisory forbearance must not underwrite existing unsuccessful policies, speculation or new growth.

Addressing Competitive Inequalities

An important consideration in the granting of supervisory forbearance should be the adverse impact it may have on other institutions not receiving such favor. It can be argued that the mere granting of supervisory forbearance invariably creates inequities and represents an unwarranted interference with normal market forces. First, since only troubled institutions are generally eligible for forbearance, the well-managed, nontroubled institutions may see themselves as being penalized for their own success while failure by others is rewarded. Second, weaker institutions, effectively shielded from failure by the forbearance, are provided with an opportunity to operate with a highly leveraged position. This is a valuable "subsidy" not generally enjoyed by most competitors in a market. Further, the institutions receiving relief are encouraged to restructure and become formidable new competitors. Such consequences often place the healthy counterparts of those receiving the relief at a distinct competitive disadvantage.

It is difficult to dismiss the potential for adverse impact on healthy, well-managed firms when less-successful institutions are singled out for special treatment and granted some benefit. Further, it must be recognized that the granting of forbearance to weakened institutions, unfortunately, has

the potential to become a disincentive to the pursuit of safe-and-sound practices by others. To the extent that increased risk-taking behavior is encouraged because of forbearance, such practices work to the disadvantage of the deposit insurance agency in that risk exposure will ultimately be increased.

The FDIC does believe, however, that in individual situations supervisory forbearance can be an effective loss-control mechanism whose use should not be automatically foreclosed. It may be the least-costly policy choice to meet some of the the FDIC's primary objectives. To the extent that these objectives conflict with market mechanisms and result in inequality or greater risk-taking,* every possible effort should be made to eliminate or substantially negate that impact.

In many respects, the FDIC's focus on containing or managing risk does not have to be at odds with the concerns of those who seek to reduce the market interference resulting from forbearance practices. For example, supervisory controls can be placed on growth, speculation prohibited, and management policies limited, all within a closely supervised framework. Thus, the institution in question will have lost some of its freedom and much of the incentive and ability to reap quick profits. A very sizable "cost" will have been extracted while the institution's management is forced to adopt less-risky practices.

If specific restrictive covenants are placed in forbearance agreements at the time of negotiation, multiple concerns can be successfully addressed. Other restrictions on preferential insider transactions, dividend payments,

management compensation and similar items can help to ensure that the institution's owners and managers will not unduly profit or gain personal benefit from the granting of forbearance. Once again, such measures, if prudent from a safety-and-soundness perspective and if followed, will help in restoring the institution to health. Through the use of carefully crafted restraints, appropriate to each individual situation, safe-and-sound operating policies can be encouraged, while at the same time concerns over competitive advantages, unjustified enrichment of insiders and other inequities can be largely ameliorated.

Basic Forbearance Standards

A broad framework for supervisory forbearance has evolved through trial and error. The FDIC believes that this experience has shown that there are some basic, fundamental tenets of successful supervisory forbearance programs that always should be followed. These are:

1. Forbearance should be discretionary. The supervisor must be free to independently judge each situation on its own merits and to grant or not grant forbearance. This is in contrast to "rules-based" forbearance, where such discretion is largely precluded, as specific criteria are established by statute or regulation. The primary distinction between the two approaches is that discretionary forbearance provides an ability to control risk and limit losses.

2. Forbearance should focus on viability. No matter what social, political or economic objectives are inherent in a particular forbearance program, a reasonable viability test for the resulting entity must be a key component. If there is no realistic expectation that the institution will achieve profitable and sound operation within a reasonable time frame, then forbearance could become an extremely costly policy option. Forbearance only should be granted to institutions with favorable future prospects. This is considered to be a fundamental tenet of any supervisory forbearance program in which some control over ultimate cost is desired.

3. Forbearance terms should be negotiated. Supervisory forbearance should not become the automatic first option when problems surface; rather, management of each individual institution should carefully consider a variety of alternatives and devise a realistic plan to address the problems. If that plan requires supervisory forbearance, then the specific terms should be negotiated with the supervisor and clearly understood by all parties.

4. Forbearance should be revokable. The supervisor must be able to terminate forbearance should the negotiated agreement not be adhered to, or in the event greater losses are discovered. Any significant change in circumstances or the economic environment should compel a renegotiation, or termination, of the transaction. In all instances, forbearance should be terminated in the event of subsequent fraud or significant insider abuse. It is the ability to terminate an institution's participation in a forbearance program that will compel compliance with negotiated terms.

This ability is considered to be a necessary component of any discretionary forbearance program.

5. Forbearance should be a temporary measure. Survival of the institution receiving forbearance should not require a permanent reliance on the waiving of normal supervisory or enforcement practices. Also, the supervisor should have the flexibility to put a reasonable time limit on achieving positive results. The continuation of forbearance should correlate directly with the actual (initial and interim) success of management's efforts to address problems.
6. Forbearance should have no permanent structural impact. Great care should be taken so as not to provide supervisory or regulatory exemption from basic rules or industry practices that will change the nature or structure of the industry or the scope of its activity. Further, any forbearance that will result in changes which are, in fact or practice, irreversible should be avoided. The goal of forbearance, absent a Congressional mandate to the contrary, should be neutrality in structural matters; not to effect permanent change.
7. Forbearance should be coupled with some limits on growth, speculation and new risk-taking activities. While the supervisor needs to retain flexibility in the actual implementation, general growth and expansion limits are considered to be a necessary precaution when granting forbearance. Such limits can be periodically modified (made either more severe or more liberal) as individual circumstances may warrant; however, they generally should remain in place as long as forbearance is

exercised. In extreme situations, the supervisor may be justified in imposing more severe conditions which mandate a reduction in the size of the institution and the scope of its activity.

8. Forbearance should never reward insiders. An institution's shareholders, managers and insiders (broadly defined) should not receive direct benefit or personal profit as a consequence of an institution being granted forbearance. Restrictions or an outright prohibition should be placed on dividend payments, management fees, increases in management compensation, preferential credit concessions available only to insiders, and consulting-type fees paid to affiliates or similar transactions.

9. Forbearance should not be granted unless other reasonable risk-control restrictions can be imposed on the institution's activity, its management and its policies. Such restrictions need not be applied in all cases and, in fact, may or may not even be appropriate when considered on a case-by-case basis. Care also should be exercised so that while an institution's business policies and direction are closely monitored, there is the least possible interference in its actual day-to-day operations. The supervisor does, however, need the flexibility to impose reasonable controls as a condition for granting forbearance.

The following restrictive covenants are examples which might be considered for inclusion when crafting forbearance proposals for specific institutions:

- o Supervisory approval is required before exercising any powers authorized, but not currently used.

- o Supervisory notification is required regarding any change in senior management officials, established management policies or the employment of an outside auditor.
- o Supervisory notification is required regarding any significant change in asset composition, liability structure or volume of off-balance-sheet activity.
- o Supervisory notification is required regarding significant external events such as the cancellation of blanket bond coverage or involvement in substantive defensive litigation.
- o Periodic submissions of business and operating plans must be made to the supervisor.
- o Periodic submission of detailed "progress" reports must be made to the supervisor, summarizing the local economic and competitive environment, the institution's current financial status and the success to date in correcting weaknesses.

Conclusions

Forbearance can be mutually beneficial to both the recipient and the deposit insurer. It provides an opportunity for survival and renewal for the former and can be an expedient, low-cost alternative to failures or lengthy enforcement procedures for the latter. Further, many other favorable benefits

often accrue to communities and bank customers when financial institutions can be returned to a healthy, sound operating basis.

The objectives of forbearance programs vary widely. For those seeking relief from what may seem to be adverse supervisory action, the objective may be as simple as a nonadversarial opportunity to restructure. For some, forbearance is a means by which particular social and economic goals can be achieved. In other cases, proponents seek the preservation and perpetuation of a particular industry grouping or specialized credit source. The FDIC believes strongly, however, that no matter what the desired result of a forbearance program, all parties should share at least one primary goal--that is, the return of the institution to a healthy, profitable status through the reduction and control of risk.

Given this safety-and-soundness focus as an underpinning, discretionary supervisory forbearance programs can be crafted to address multiple concerns. First, and most basic, the supervisor needs independence from external, political or industry influences and the discretion to tailor forbearance to the characteristics unique to each situation. In addition, reasonable precautions need to be taken, some risk-control limits set and, perhaps, a cost exacted in the pursuit of competitive equity and limiting market interference. Forbearance, however, has proven to be, and should continue to be, a useful, cost-saving and effective supervisory mechanism.

FOOTNOTES

¹A description of supervisory enforcement authority and related powers available for use by the FDIC can be found in Section 8 of the Federal Deposit Insurance Act (codified to 12 U.S.C. 1818(a) through 1818(r) and 1828(j)).

²During the twelve-month period ending June 30, 1988, a total of 542 insured institutions were added to the FDIC's "problem-bank" list while 690 were removed. The removals may be categorized as follows: 181 were closed or granted financial assistance; 87 entered into a nonassisted voluntary merger with another institution; and 422 showed significant improvement in condition and no longer presented an undue risk to the deposit insurance fund. The total number of problem banks as of June 30, 1987 was 1,624; the number as of June 30, 1988 was 1,476.

³A loss will probably be sustained by the deposit insurance fund even if the closed institution were "book solvent" at the time of its closing. This arises because the liquidation value of most banking firms is significantly lower than their value as a "going" concern. At the other extreme, the supervisory disregard of unsafe and unsound operating practices creates substantially greater risk and will always lead to an increased probability of loss to the deposit insurance fund.

⁴It is interesting to note that several other desirable results often can be achieved. These include fewer bank failures, less disruption in local communities and a reduced loss to be borne by the deposit insurance fund. The question of competitive inequalities that arise when forbearance is granted to relatively high-risk institutions, however, has not been addressed in many of the prevalent forms of supervisory forbearance.

⁵These states are: Colorado, Illinois, Iowa, Kansas, Louisiana, Minnesota, Mississippi, Nebraska, Missouri, Oklahoma and Tennessee.

⁶Eleven applications were returned unprocessed because of the institution's ineligibility for participation in the program and an additional six were withdrawn by the applicants during the review process. The FDIC has terminated two institutions from participation in the program because of their management's failure to comply with one or more aspects of the program. The primary reason for denial is the failure of the institution's management to develop a realistic operating plan which provides for restoration of the capital base over several years.

⁷The "threshold" test for eligibility is the absence of capital adequacy. In actual practice, most institutions that experience serious asset-quality problems soon dissipate their capital and are judged to be inadequately capitalized.

⁸The Congressional Record, March 26, 1987, p. S.3941.

⁹Reference is made to the "statutory factors" enumerated originally in the Federal Reserve Act and adopted as Section 6 of the new Federal Deposit Insurance Act (12 U.S.C. 1816) effective September 21, 1950. This language setting forth essentially the same safety-and-soundness factors for consideration is repeated in Section c(5) of the Bank Merger Act (12 U.S.C. 1828(c)), Section 3(a) of the Bank Holding Company Act (12 U.S.C. 1842(c)) and other banking legislation such as the Change in Bank Control Act (12 C.F.R. 225.13).

¹⁰It is noted that three of the institutions denied entrance to the Agricultural Loan-Loss Amortization Program have subsequently failed. While it is recognized that it is not indicative of the success or failure of the Program, to date, no insured bank granted supervisory consent by the FDIC to amortize its loan losses has failed.

¹¹These states are: Colorado, Illinois, Iowa, Kansas, Louisiana, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota, Texas and Wisconsin.

¹²FDIC (1984), p. 99.

¹³The Congressional Record, September 24, 1982, p. S. 12214 (remarks by Senator Donald W. Riegle, Jr.).

¹⁴FDIC (1984), p. 99.

¹⁵Federal Deposit Insurance Corporation, Annual Report, 1982 (1983), pp. 3-5.

¹⁶Ibid., p. 4.

¹⁷The Committee Report to Accompany S. 2879, 97th Congress, Depository Institutions Amendments of 1982, September 3, 1982, p. 19.

¹⁸FHLBB (1983), p. 158.

¹⁹FHLBB (1986).

²⁰Certain forbearances are specifically set forth as items not subject to negotiation. These include safety-and-soundness controls over transactions with affiliates, prohibited management interlocks and Community Reinvestment Act compliance.

Chapter 7

FAILURE RESOLUTION

In competitive markets some institutions prosper while others do not. Today, banks operate in highly competitive markets, but not all banks can survive in such markets. By itself, the failure of individual banks should not be of great concern. The FDIC's responsibility is to maintain public confidence and stability in the banking system, rather than in any individual bank within that system, and survival of the fittest leads to a healthier system. Nevertheless, how individual institutions are handled as they approach the point of insolvency and when they become insolvent can have important implications for the long-term health and stability of the deposit insurer and the banking system itself.

These considerations warrant a careful review of the policies and procedures used by the FDIC and other bank regulators in handling failing or failed institutions. This chapter reviews the FDIC's policy objectives, the methods it has available to meet those objectives, and the strengths and weaknesses of these methods. Recommendations are presented for improving the handling of bank failures.

Background

Policy Objectives¹

There are several primary objectives the FDIC seeks to achieve in determining the most appropriate failure-resolution method. First and foremost, there is the need to maintain public confidence and stability in the banking system. The FDIC must be cognizant of the possibility that how it handles a particular failure may have adverse implications for other banks, and it will seek to avoid failure-resolution methods that unnecessarily risk destabilizing the banking system. Second, there is a need to maintain market discipline against risk-taking. How the FDIC handles bank failures has implications for the amount of discipline that will be exerted by the market against risk-taking by other banks. Failure-resolution policies influence the probability of loss and size of loss that claimants may incur. In turn, these factors influence the degree to which any particular group of claimants will monitor and attempt to control a bank's risk-taking. Third, the failure-resolution procedure should be cost-effective. By law, the FDIC is required to meet a "cost test" in which it must be reasonably satisfied that the alternative it is choosing will be less costly than a deposit payoff. Fourth, the agency should try to be as equitable and consistent as possible in its failure-resolution policies. In recent years, the equity issue has become most prominent with respect to the treatment of uninsured depositors and creditors in large versus small banks.

There are at least two secondary objectives in handling bank failures. The first is to minimize disruption to the community. This requires

transactions that can be implemented swiftly and smoothly. The second goal is to minimize the government's role in owning, financing, and managing financial institutions and financial assets. This is achieved by selecting private-sector resolutions whenever possible.

The objectives outlined above are not always mutually compatible and decisions must be made regarding how to balance these trade-offs in any given situation. The most basic trade-off exists between stability and market discipline. While some degree of market discipline is necessary to promote stability, too much market discipline can lead to greater instability. A second inherent conflict exists between equity and cost-effectiveness. Consistency and equity considerations suggest that all bank failures should be handled in the same manner. However, this may reduce the FDIC's flexibility in obtaining the least costly or least disruptive transaction in any given situation. These and other possible conflicts among policy objectives make the selection of appropriate failure-resolution policies a complicated process.

Methods of Resolving Failures

There are five basic options available to the FDIC in handling the affairs of a failed or failing bank: (1) deposit payoff, (2) purchase-and-assumption transaction, (3) insured-deposit transfer, (4) open-bank assistance, and (5) bridge bank.

In a deposit payoff, as soon as the bank is closed by the chartering authority, the FDIC is appointed receiver and steps in to pay all insured

depositors the full amount of their claims and begins to liquidate the assets of the failed bank. Uninsured depositors and other general creditors of the bank generally do not receive either immediate or full reimbursement on their claims. They obtain what are called receiver's certificates, which entitle the holders to their proportionate share of the collections on the failed bank's assets.² The FDIC also is entitled to a share of these collections since it stands in the place of the insured depositors. In the absence of a depositor preference law, the FDIC (standing in the place of insured depositors), uninsured depositors, and all other groups of general creditors receive the same proportionate return from the receivership on their claims.

A second method used by the FDIC to handle bank failures is referred to as a "purchase-and-assumption" or "P&A" transaction. Under this approach, a buyer steps forward to "purchase" all or some of the failed bank's assets and "assumes" its deposits and certain of its liabilities. The usual procedure is for the FDIC to invite a number of possible acquirers to a bidders' meeting. A transaction is consummated with the highest acceptable bidder. An important difference between a P&A transaction and a payoff is that in a P&A all depositors, uninsured as well as insured, receive full payment on their claims since their claims are "assumed" by the acquiring institution. In the absence of a depositor preference statute, general creditors also normally receive full payment on their claims.^{3,4}

A third type of failure-resolution transaction is called an insured-deposit transfer, whereby only the insured deposits and secured liabilities are transferred to another institution. Uninsured and unsecured liabilities remain with the receivership. Unlike in a P&A transaction, the

receiving bank has not technically purchased the bank, but is acting as an agent for the FDIC by assuming the insured deposits. Sufficient cash is paid by the FDIC to the institution accepting the failed bank's insured and secured liabilities equal to the amount of those liabilities minus any purchase premium. Generally, the acquiring institution will use some of its cash to purchase certain of the failed bank's assets. An insured-deposit transfer is generally viewed as a variation of a deposit payoff because uninsured and unsecured creditors are not protected and they usually suffer some loss. However, the transaction has some of the characteristics of a P&A in that another institution assumes certain liabilities and, in recent years, usually acquires some of the assets of the failed bank. Often, when a bank has high-cost, volatile funds, bidders will opt for an insured-deposit transfer because, unlike in a P&A, they have the ability to renegotiate the terms on debt instruments.

The fourth type of transaction is called open-bank assistance. In many respects, open-bank assistance has the same effects as a P&A transaction. The major difference is that with open-bank assistance a transaction occurs before the failing bank is technically declared insolvent and closed. Generally, the FDIC provides enough assistance to cover the difference between the estimated market value of the bank's assets and its liabilities (the bank's negative net worth). New capital is injected by private investors. As in a P&A, all depositors and generally all general creditors are protected against loss. However, as a matter of policy, the following generally are not protected against loss: management, subordinated debt holders, bank stockholders and, if there is a holding company, its creditors and shareholders.

A fifth type of transaction is a bridge bank. As its name implies, this solution is temporary: it merely provides a "bridge" until a more permanent solution can be arranged. When a bank fails, it may be advantageous for the FDIC to keep it operating for a brief period until prospective purchasers can assess the institution's condition in order to make a reasonable offer for the bank. If kept operational, the bank can retain much of its value. Moreover, there is likely to be less disruption to the local community until the situation is resolved through a more permanent solution. The FDIC received authority to operate bridge banks in 1987, and as of December 15, 1988 had used its new authority on three occasions.⁵

Priority of Claims in a Bank Failure

In order to understand the connection between particular methods for handling bank failures and the FDIC's policy objectives, it is important to distinguish between different groups of creditors and other affected parties, and how these groups are treated when a bank fails. For discussion purposes these relevant parties are divided into eight groups as follows:

1. Insured depositors and secured creditors
2. Uninsured and unsecured depositors
3. Unsecured, nondeposit creditors (excluding subordinated debt holders)
4. Holders of contingent claims
5. FDIC
6. Subordinated debt holders and bank stockholders

7. Bank management
8. Bank holding company creditors and shareholders

The FDIC's paramount responsibility is to protect insured depositors. However, as a result of its protection of depositors, the FDIC also may protect other creditors against loss. Moreover, regardless of the failure-resolution method chosen by the FDIC, some uninsured creditors will receive at least a partial reimbursement on their claims against the bank. The degree to which each group of creditors may or may not be protected against loss when a bank fails has important implications regarding the FDIC's policy objectives.

Insured depositors and secured creditors. In order of priority, insured depositors and secured creditors rank at the top of the list. Regardless of the failure-resolution method chosen by the FDIC, insured depositors always are protected in full against loss. Thus, it is taken as given that the FDIC's foremost objective in determining appropriate failure-resolution policies is to ensure that insured depositors are completely protected against loss.

While it is well-recognized that insured depositors are fully protected against loss, the public is less aware that secured liabilities probably are equally well-protected. Certain deposit liabilities and any nondeposit liability may be secured by assets on the bank's balance sheet. Because the assets pledged to back bank debt generally consist of government securities or other high-quality assets, the holders of secured debt, for all intents and purposes, are fully protected in the event the bank fails. While there are

good reasons why a lender might want to obtain security for his or her loan, secured liabilities have the undesirable side effect of increasing the FDIC's failure-resolution costs. Because the assets used to secure bank borrowings are not available to settle the claims of the unsecured creditors, which include the FDIC, these creditors receive less reimbursement on their claims as more bank debt becomes secured.

The higher priority of secured liabilities relative to the FDIC's claim on a failed bank's assets raises the FDIC's costs even further in instances when the market realizes beforehand that a bank may be heading toward insolvency. Market discipline works quite well once a problem is widely recognized, and uninsured and unsecured creditors will flee an institution that is perceived to be in trouble. This flight may take the form of a slow or a fast run and experience indicates it will occur whether or not an institution is generally perceived to be "too-large-to-default." In the case of Continental Illinois, a run occurred even after the FDIC issued a statement that it would protect all bank creditors.

As the uninsured, unsecured creditors flee, the problem institution still must fund its assets. For some period it may be able to raise funds by paying higher rates, but as problems become more severe the only way it can raise funds is to provide adequate collateral against its borrowings. If its borrowings can be fully secured it may be able to raise funds in the market; more likely it will turn to the Federal Reserve. The Federal Reserve will lend to a solvent (or apparently solvent) institution that has adequate collateral. As this process accelerates, the bank's best assets will become pledged against its borrowings. Eventually a bank may reach the point where

it does not have any good assets left to pledge (or sell). At this point if it still is unable to fund itself it is likely to be declared insolvent by the chartering authority. The FDIC then steps into the picture: a failure-resolution method is determined in which insured, if not all, deposits are protected, assets are sold, and the receipts from the unpledged assets are used to partially reimburse the FDIC and any other unprotected creditors. However, because the unpledged assets are the worst of the bank's assets, the FDIC and any remaining unprotected creditors receive less than if the good assets had not been used to secure bank borrowings.

One recommendation that follows from a realization that secured liabilities have a higher priority than the FDIC's claims is that secured liabilities should be made a part of the assessment base. Insured deposits are assessed because they are protected by the FDIC. If secured liabilities also receive greater protection at the expense of the FDIC, an argument can be made that they too should be assessed. The greater income received from expanding the assessment base can help compensate for the FDIC's greater losses due to secured liabilities.

Uninsured and unsecured depositors. The treatment of uninsured, unsecured depositors varies depending on how a failure is handled. In a deposit payoff or a deposit transfer, uninsured depositors generally share losses on a pro rata basis with the FDIC and other general creditors. If a depositor preference statute is applicable, the FDIC and uninsured depositors stand ahead of other general creditors. In a P&A or open-bank assistance transaction, uninsured and unsecured depositors may receive equal status to insured depositors and secured debt holders; that is, depending on the structure of the transaction, they may be completely protected against loss.

Differences in the treatment of uninsured and unsecured depositors, depending on the type of failure-resolution method, have led to charges of inconsistency and inequity being levied against the FDIC, partly because these depositors may be treated differently from one failure to the next and partly because there is a greater likelihood that smaller banks will be handled via a deposit payoff. In partial defense of the FDIC on this issue, its policy generally has been to protect all uninsured and unsecured depositors regardless of the size of the bank whenever practical. Nevertheless, it is true that it is more likely that there will not be an interested purchaser at a cost-effective price for a smaller bank than for a larger bank. Moreover, the FDIC is more likely to provide assistance under the "essentiality" doctrine for a large bank.⁶ Thus, it cannot be denied that there is a greater probability that losses will be suffered by uninsured creditors of small versus large banks. The issue to be addressed in a later section is what, if anything, should be done about this situation.

Unsecured, nondeposit creditors. Unsecured, nondeposit creditors fall into the category of other general creditors. This group may include Fed funds purchased and other similar borrowings. For national banks and state banks where a depositor preference statute is not applicable, these creditors are on equal footing with uninsured, unsecured depositors. This means they share pro rata in losses with uninsured, unsecured depositors and the FDIC if the failure is handled as a deposit payoff or an insured-deposit transfer; or ordinarily they incur no loss if the failure is handled as a P&A or open-bank assistance transaction. For state-chartered banks where a depositor preference statute is applicable, this group is a notch below depositors in order of priority. Thus, in depositor preference states, such creditors stand

to lose a great deal if a state bank is nearing the point of insolvency, depending on how the FDIC handles the situation.

Holders of contingent claims. In many instances when a bank fails there are a large number of outstanding contingent claims against the bank. These claims include letters of credit and loan commitments as well as lawsuits. Depending on their eventual outcome, contingent claims may obtain general creditor status. If so, they may be treated in the same manner as other general creditor claims. They may be fully protected in a P&A (unless there is depositor preference) and open-bank assistance transactions, and will share pro rata in any losses in a deposit payoff or insured-deposit transfer.

Because of this difference in the treatment of general creditor claims, significant contingent claims against a failed or failing bank can foreclose the possibility of open-bank assistance or a P&A transaction. For example, if a large outstanding lawsuit against a failed bank has a reasonable prospect for success, its expected cost may be large enough to make a P&A or open-bank assistance more expensive than a payoff.⁷

While many creditors flee a failing institution, the number of contingent claims may increase rather than decrease as a bank approaches insolvency. A troubled institution is likely to attract lawsuits from a variety of disgruntled customers and creditors. Thus, contingent claims often are more than just an insignificant factor for the FDIC to consider in determining how to handle a failing bank.

FDIC. The FDIC assumes the role or standing of the depositors or creditors it pays off. Basically, it stands in line in their place. Legally, the FDIC is subrogated to insured depositors' rights. Everything else depends on how the transaction is handled. The FDIC always is repaid less than insured depositors and secured creditors. Conversely, the FDIC handles failures in such a way that it almost always comes out ahead of subordinated debt holders, bank stockholders and bank holding company creditors and shareholders. Practically speaking, the FDIC receives less payment on its claims than do uninsured, unsecured depositors and other general creditors, since these groups are normally fully protected in P&As and open-bank assistance transactions. If there is an applicable depositor preference statute the FDIC often protects only depositors in full and receives a greater proportional payment than nondeposit general creditors. If there is a payoff or insured-deposit transfer, only insured depositors are protected in full and the FDIC stands in their place and has equal status with uninsured, unsecured depositors.

Subordinated debt holders and bank stockholders. In bank-failure transactions these two groups are treated much the same. Although subordinated debt holders rank a notch above stockholders in order of priority, both groups stand behind depositors, general creditors and the FDIC; therefore, they stand to lose most and generally all of their investment when a bank fails. This is true whether the failure is handled as a payoff, an insured-deposit transfer or a P&A transaction. In open-bank assistance transactions, shareholders and subordinated debt holders may have slightly more leverage since they must agree to the transaction. Nevertheless, despite their leverage, because the FDIC conditions any assistance upon shareholder

and subordinated debt holder concessions, they rarely receive more than a few cents on the dollar on these deals. Because of their inferior status in bank-failure cases the existence of subordinated debt and equity capital helps to lower the FDIC's failure-resolution costs and helps to impose market discipline on the banking system.

Bank management. Bank managers have their own stake in a bank since their reputation and careers are on the line. When a bank fails, senior managers usually lose their jobs. An acquiring institution may choose to keep some of the top executives of the former bank, but generally most of them are forced to leave whether the transaction is an insured-deposit transfer, a P&A, or open-bank assistance. Oftentimes, these individuals have a difficult time finding comparable employment elsewhere. This is particularly true if it is perceived that the bank's problems were due to mismanagement rather than to general economic conditions. Moreover, there is the possibility that management will be sued for negligence. The potential loss of employment, income and status provides a strong incentive for management to see that their bank performs in an acceptable manner and does not become insolvent.

Bank holding company creditors and shareholders. An additional incentive to curb excessive risk-taking exists in the form of creditors and shareholders of the parent holding company (if there is a holding company). When a bank becomes insolvent and is closed, holding company creditors and shareholders normally would not receive any value from that bank. The FDIC's handling of large-bank failures in recent years has made it increasingly clear that the safety net of federal deposit insurance does not extend to holding companies. The marketplace is beginning to acknowledge this difference

between banks and their holding companies as the spread widens on interest rates offered by the two groups of institutions. This is a healthy development, one that will encourage holding company creditors and shareholders to pay attention to the financial condition of the banks within the holding company and to seek adequate compensation for the risks in those banks.

The FDIC's relatively new authority to operate bridge banks strengthens its hand in being able to distinguish between banks and their parent holding company in handling bank failures. When the banks in First Republic Bank Corporation became insolvent, the banks were closed, put into a bridge bank and sold to the highest bidder. As a result, the holding company and its creditors and shareholders did not need to be consulted. Also, barring exceptional collection results on the banks' assets, they only have dim prospects for any recovery from the liquidation of the banks' assets. This contrasts with the open-bank assistance transaction for First City Bancorporation where obtaining voluntary concessions from holding company creditors was a difficult process and some creditors received full payment on their claims.⁸

Trade-offs among Policy Objectives

Understanding the priority of claims in a bank failure helps in assessing how particular methods for handling bank failures relate to the FDIC's policy objectives. The FDIC's foremost objective is to maintain public confidence and stability in the banking system. For any individual bank

failure such a policy objective might suggest protecting as many creditor groups as possible. However, while such a policy might satisfy the desired objective over a relatively short time frame, it would be self-defeating in the long run. Protecting all creditor groups at all times would remove any market discipline from the system, leading to greater risk-taking by insured institutions and eventually to more insolvencies, higher failure-resolution costs and less, rather than more, stability.

Any failure-resolution policy designed for more than the shortest of time frames must address the critical issue of how much market discipline is appropriate. Clearly, some market discipline is necessary to control excessive risk-taking. However, too much market discipline could bring us right back to where we were in the 1930s when bank runs brought the system to its knees.

Of the eight different groups of creditors and other affected parties discussed in the previous section, four groups almost always suffer losses when a bank fails; three groups occasionally suffer losses; and only one group, insured depositors and fully secured creditors, never suffers a loss when a bank fails. The groups that almost always suffer losses include the FDIC, subordinated debt holders and bank stockholders, bank management, and bank holding company creditors and shareholders. Each of these groups has an incentive to control a bank's risk-taking. The only time that this incentive may become perverse is when the bank is nearing the point of insolvency. As a bank nears the point of insolvency the incentive for self-preservation may lead unprotected creditors and management to encourage the very risk-taking that is viewed as imprudent when the bank is healthy.

Creditor groups that occasionally suffer losses when a bank fails also have an incentive to control bank risk-taking. As pointed out, these groups include the uninsured and unsecured depositors, and the unsecured, nondeposit creditors. Although these creditors often receive full protection when a bank fails, they cannot be certain of such protection. If a bank failure is handled via a deposit payoff or an insured-deposit transfer, these groups suffer losses. Moreover, if a depositor preference statute is applicable, nondeposit creditors face the possibility of much greater losses. The uncertainty with respect to their treatment leads these groups to impose some discipline on banks.

All of this suggests there probably is a great deal of market discipline on risk-taking by healthy banks. As discussed in Chapter 4, it is not clear that additional market discipline is necessary for such banks. However, there is a view that argues that at least some of this discipline occurs because of uncertainties about the way the FDIC will handle a bank failure. If there is an interested purchaser at a cost-effective price, the FDIC will arrange a P&A or open-bank assistance transaction and protect depositors and generally all bank creditors (excluding subordinated debt holders). If there is no interested purchaser at a cost-effective price, the FDIC will arrange for an insured-deposit transfer or a deposit payoff, subjecting unsecured, uninsured bank creditors to some loss. Because the outcome for these creditors is dependent on the failure-resolution method utilized, and that method varies depending on individual circumstances, the FDIC's handling of bank failures has been viewed by some to be inconsistent and inequitable.

Consistency and equity in the handling of bank failures are worthwhile objectives. However, they cannot be viewed in isolation. Any possible policy strides toward greater consistency and equity also must consider the effects on stability, market discipline and cost-effectiveness before it can be determined whether such a policy change is desirable. For example, a more uniform (i.e., consistent) treatment of all creditors reduces the FDIC's flexibility in handling bank failures. Limiting the FDIC's flexibility in some instances will increase market disruption and failure-resolution costs. Ideally, a failure-resolution policy could be developed that would not only be consistent and fair, but also would economize on the FDIC's costs and operate to restrain bank risk. While the ideal may be unattainable, there is always room for improvement. Later discussion in this chapter addresses alternative failure-resolution policies in the context of the FDIC's policy objectives, with the intent of recommending policies that may represent an improvement over the current system.

Issues Related to Current Failure-Resolution Policies

Current FDIC Policy

The FDIC's policy is to keep as many failed or failing-bank assets as possible in the private sector by attempting to arrange a P&A or open-bank assistance transaction whenever practical. In open-bank assistance transactions, usually all of a bank's assets are transferred to the acquirer. Similarly, the preferred variation of the closed-bank P&A transaction is a

"whole-bank" transaction in which all of the bank's assets are passed to the acquirer. If the FDIC is unable to arrange either of these types of transactions at a price that satisfies the cost test, it attempts to conduct a more traditional closed-bank P&A in which some of the failed bank's assets are passed to the acquirer, while some remain in liquidation. The next option is an insured-deposit transfer, selling as many assets as possible. Only if all else fails does the FDIC resort to a deposit payoff and a liquidation of all the bank's assets.

In the past, in a P&A transaction only a small portion of the failed bank's assets have been transferred to the acquiring institution. Generally, these include the best of those assets: government securities that are marked-to-market, cash, Fed funds sold and probably the installment loan portfolio. The remaining difference between assets acquired and liabilities assumed is covered by a cash transfer from the FDIC to the acquiring institution. It then falls to the FDIC to collect as much as it can on the balance of the assets it retains in order to reimburse itself for some portion of its cash outlay.

Currently, the FDIC attempts to pass a larger portion of a failed bank's assets to an acquiring institution. In many cases all, or substantially all, of the failed bank's assets are sold at a discount from book value to the acquiring institution. These "whole-bank" transactions are more technically referred to as "total asset P&A" transactions. The first such transaction was completed in April of 1987. Altogether, 19 whole-bank transactions were completed in 1987, 65 in 1988, through November.

In the typical whole-bank transaction a one-time cash outlay is made by the FDIC to account for the difference between the market value of the assets and liabilities assumed by the acquirer, less any purchase premium. Subsequently, the FDIC has no further financial obligation to the acquirer. There are no income maintenance agreements or guaranteed rates of return on these assets.

The current FDIC policy has received both praise and criticism. On the plus side, whole-bank transactions reduce the need for the FDIC to advance cash to the acquirer and minimize the FDIC's involvement in the liquidation of the failed bank's assets. Such transactions can be cost-effective and they can limit the FDIC's involvement in the private sector. In addition, as compared to the more traditional P&A, whole-bank transactions can further reduce any disruption to local economic activity by ensuring that a greater portion of the failed bank's customers continue to have access to banking services and that their loans are not placed in a "liquidation."

On the minus side, some have argued that the emphasis on P&As and open-bank assistance transactions reduces market discipline, preserves overcapacity in the banking industry, and sometimes leads to situations where the FDIC obtains an ownership position in an ongoing institution. The argument against FDIC ownership of banks is that it creates conflict-of-interest situations and unfair competitive advantages. It also is suggested that while the FDIC's current failure-resolution policies may provide for a more consistent treatment of creditors in large versus small banks, some inequities remain.

In the sections that follow, these and other aspects of the FDIC's failure-resolution policies are discussed. Subsequently, various alternatives to the current policy are considered.

Disposition of Assets

One aspect of current FDIC policy that appears to be a clear success is the emphasis on keeping the assets of failed banks in ongoing institutions rather than in a liquidation. There is reason to believe that there are liquidation costs that can be avoided by keeping assets in an ongoing institution. Once out of the bank, assets can lose value quickly. Semicompleted projects that face temporary disruptions in the production process may lose value. Assets of a failed bank may become tainted due to their association with the bank. Liquidation expenses may be substantial if the FDIC or any other liquidation organization takes control of assets and has to assess their condition, market them, and negotiate with buyers. For these and, perhaps, other reasons, assets would appear to be worth more in an ongoing institution.

There is some empirical evidence to suggest that assets are worth more in an ongoing institution. Bovenzi and Murton (1988) show that in 1985 and 1986 the FDIC's costs in handling bank failures averaged 30 percent of total failed-bank assets. At that time it was FDIC policy to pass only the "good" assets to the acquiring institution and retain the "bad" assets in liquidation. So for the sample period, virtually all risky assets in failed banks were liquidated by the FDIC. More recent experience with failed-bank

transactions in which the FDIC passes all of the assets to an acquiring institution suggests that the FDIC's costs can average well below 30 percent of total failed-bank assets. For the 14 open-bank and 38 whole-bank transactions conducted in the first half of 1988, on average, the cost to the FDIC was about 20 percent of the bank's assets.⁹ This suggests there may be differences in the value of similar assets depending on whether they are left in an ongoing institution or are liquidated. Moreover, it suggests the FDIC is capturing some of this value differential through its bidding process.

James (1988) also addressed the issue of whether there is a difference in "liquidation costs" between the FDIC and private parties. For the same sample of bank failures in 1985 and 1986, James found a negative and statistically significant correlation between the estimated loss on the failed bank's assets and the volume of those assets assumed by the acquirer. This implies more is recovered when assets are liquidated by an acquiring bank than when assets are liquidated by the FDIC. The difference in liquidation costs could arise due to lost charter value or differences in operational efficiency. James was unable to provide a test between these competing hypotheses, but conjectured that the differences in liquidation costs are too large to arise solely from lost charter values.

These studies cannot be regarded as conclusive evidence that there are differences in liquidation costs depending on how assets of failed banks are treated. There may be differences in asset quality between the group of assets analyzed in Bovenzi and Murton's paper and those analyzed subsequently that account for some of the difference. Moreover, acquiring institutions may realize gains or losses on their asset purchases which could add to or

subtract from any difference. With respect to James' analysis it should be made clear that there were few "bad" assets passed to the acquirer in any of the P&As conducted in 1985 and 1986. Thus, his sample does not provide the best basis for conducting such a test. Nevertheless, there is enough of a basis to support the view that, regardless of how it may treat the creditors of a failed bank, the FDIC should continue its efforts to leave the assets of failed banks in ongoing institutions.

Competitive Effects of the FDIC's Failure-Resolution Policies

It has been argued that the FDIC's policy of encouraging open-bank assistance transactions and whole-bank transactions for failing institutions creates competitive inequities and may preserve overcapacity in the banking industry. The best way to present the argument is to describe a situation in which a market is serviced by four or five banks. The economy has been bad for some period and none of the banks are stellar performers. One bank, however, is much worse than the others and approaches the FDIC for assistance. The FDIC determines that the bank is near failure and arranges a transaction with a third party in which some financial assistance is provided by the FDIC. From the FDIC's viewpoint it is the least costly and least disruptive way to handle the situation. But some would argue that the distressed condition of all of the banks in the market may indicate that there are too many banks servicing the market and that the FDIC should conduct a deposit payoff so as not to preserve overcapacity in the market.

If, in arranging P&A and open-bank assistance transactions, the FDIC subsidizes one or more institutions but not others in the same market, then there are competitive inequities. However, FDIC assistance agreements do not appear to be subsidizing the assisted institutions. There are significant costs to the institution that applies for such assistance. First, the interests of shareholders and junior creditors must be substantially wiped out. Second, senior management is likely to be replaced. Third, private investors must be ready to recapitalize the institution. If these conditions are met the FDIC will consider an assistance request.

Even if the owners, junior creditors and management of a failing institution receive no apparent subsidy, an inequity would exist if the acquirers of failed or failing institutions received subsidies. Here the issue is a little more complicated; however, there still is no apparent inequity. As a general rule the FDIC will try to inject enough financial assistance to bring the institution's net worth to zero. This is the cost of the insolvency and the insurer's obligation. It is up to the new owners to provide additional capital to meet regulatory requirements.

If the transaction works this cleanly, then there is no subsidy to the new owners. They are not granted any "forbearance" from supervisory or regulatory requirements and they must meet the same standards that apply to any other FDIC-insured institution. Generally, the FDIC's failure-resolution transactions work as described here. In all whole-bank transactions the winning bidder must accept an FDIC payment less than the FDIC's estimate of the loss it would expect to incur if it conducted a deposit payoff. If the acquirer can liquidate assets at a lower cost than the FDIC it may produce a

profit from existing assets. However, since the acquirer of a closed bank is determined through a bidding process, the opportunity to obtain a profit is open to all bidders and competition helps ensure that there are no excess profits. In open-bank assistance transactions, there generally is open bidding. However, in instances where there is no open bidding the transaction must still be less costly than a payoff.

This is not to say that losses in a bank can be estimated precisely and that the FDIC or bidders can determine the FDIC payment necessary to bring the bank's net worth exactly to zero. Nevertheless, the FDIC does estimate loss on assets based on its judgement as to how that particular bank's condition relates to historical experience. While overpayments or underpayments are likely to occur in individual instances, on balance, FDIC cash outlays do not appear to be excessive.

The issue here is less one of unfair competition than of possible overcapacity in the market. If the market is only capable of supporting the existing banks absent the one that was failing, then the fact that new owners acquired the failing bank likely means that another of the banks will experience greater difficulty or that market share and bank size must decline for some combination of these banks.

A key issue in determining whether the FDIC is unnecessarily preserving overcapacity is the amount of new capital the acquirers bring to the transaction. Bank regulators have a clear responsibility to determine if an institution qualifies for a bank charter or federal deposit insurance. In each instance the FDIC must consider the financial history and condition of

the bank, the adequacy of its capital structure, its future earnings prospects, the general character of its management, the convenience and needs of the community to be served by the bank, and whether or not the bank's corporate powers are consistent with the purpose of the Federal Deposit Insurance Act. However, if individuals or institutions are willing to risk their capital on a new venture, then they are making a decision that the market can support their new venture. It is their capital that is at risk if they are wrong in their assessment of the market. Presuming that these individuals or institutions meet the other necessary requirements to obtain a bank charter and federal deposit insurance, it is not clear that the FDIC or any other regulatory authority should impose its judgement as to whether the market can support another bank over the judgement of people willing to put up their own money.

There may be overcapacity even if the new owners are correct in their assessment of their own future viability. This means other banks in the market may shrink or fail. From the insurer's perspective another possible failure means it may incur short-term costs it would not otherwise incur if it had not allowed another bank into the market. However, it does not appear that public policy or the insurer's long-term interests are best served by denying a bank charter and federal deposit insurance to an institution that meets all the necessary requirements.

Our economic system is based on the principle that competition is desirable. Given that certain safeguards exist to protect the deposit insurance system and the banking system, the size of the banking industry should be market-determined. Impediments to entry and exit from the industry should not be so severe as to preclude the ability of the marketplace to weed

out the most inefficient producers or to eliminate overcapacity or undercapacity. Easy entry into markets promotes efficiency. Efficient banks are in the deposit insurer's and the public's best interest. Arranging assistance transactions where no new private capital is at risk may be inequitable and may unnecessarily preserve overcapacity. But if there is new capital, then the market is making a decision that another bank is viable. As long as the FDIC does not subsidize acquirers of failed banks, future bank failures reflect the market's weeding out of the least-efficient producers rather than an unnecessary preservation of overcapacity or inequitable competition.

FDIC Investment in Banks

There are situations where the FDIC's resolution of a particular failing or failed bank results in the FDIC obtaining an ownership position in the bank. The most notable instance of this occurred in 1984 when the FDIC took a large ownership position in Continental Illinois. First Republic Bank Corporation is another example. NCNB committed \$250 million to acquire a 20 percent ownership position in the banks of that holding company. Although NCNB runs the company, it receives only 20 percent of the profits. NCNB has five years to buy out the FDIC's ownership position. Until then the FDIC will receive 80 percent of the company's profits.

There are a number of issues that arise with respect to FDIC ownership of banks. Are there conflicts of interest? Owners presumably are interested in profit maximization. As a regulator and supervisor the FDIC is interested

that banks operate in a safe-and-sound manner. But what happens if the institution has difficulty meeting capital standards or earning adequate profits? What action should the FDIC take as supervisor or insurer, and will such action be influenced by the FDIC's ownership position? One can make a case that the FDIC may overreact the other way and be too conservative in its treatment of banks it owns in order to avoid any appearance of conflict-of-interest abuse. Nevertheless, the potential for abuse exists even if abuse has not occurred.

A related issue is whether banks partially owned by the FDIC have unfair competitive advantages. This could occur if these banks were able to raise funds at a lower cost due to a perception that they were safer institutions because of the FDIC's involvement. An unfair advantage also would exist if the FDIC were less stringent in applying its regulatory and supervisory authority over such banks.

In most bank failures the FDIC arranges a solution in which it has no investment in the new institution. In most P&A transactions the acquirer assumes the failed bank's liabilities, purchases assets at a discount from book value, recapitalizes the institution and goes on its way. The FDIC's continued interest extends no further than for any other institution it may insure. Such transactions are preferable from most viewpoints.

The incentive for the FDIC to take warrants or stock as part of some failure-resolution transactions increases when there is uncertainty involved in estimating asset values. The FDIC and bidders for a failing bank carefully examine the assets and estimate their value, but there is always some

uncertainty. If the uncertainty is significant, potential buyers may demand protection against unforeseen losses in the current portfolio. If buyers demand to be compensated for unexpected losses on a pool of problem assets, then the FDIC will want reimbursement should those assets turn out to be better than expected. Such reimbursement can be negotiated through the use of warrants or stock options.

In transactions involving smaller banks there really is no need for the FDIC to capture any upside gain. The upside benefit is likely to be small relative to the public-policy and administrative costs associated with an ownership position. It is in the larger failing-bank situations that the FDIC has a greater incentive to take an ownership position. The potential difference between actual and estimated asset value can be significant. Few bidders are likely to put forth an offer involving a fixed, one-time cash payment from the FDIC unless they build-in a significant risk premium. By negotiating a deal in which either party can be compensated should the existing asset portfolio have a value different from what is expected, the expected cost of the transaction can be lowered. It is the expectation of lower failure-resolution costs that causes the FDIC to take ownership positions in some failure-resolution transactions.

The other reason why the FDIC may invest in a bank is if bidders cannot or will not put up sufficient capital at the time of the transaction and there are significant costs or public-policy reasons for entering into a transaction. Continental Illinois and First Republic Bank Corporation each had over \$30 billion in total assets. Adequate capitalization would have required over \$1 billion in each instance. With respect to Continental Illinois, there

were no serious bidders willing to put up such an amount. NCNB is willing to make such a commitment of greater than \$1 billion for First Republic, but only over a period not to exceed five years. In both instances the FDIC is not involved in the day-to-day operation of the companies, and in both instances the FDIC viewed the deals as the best available alternative despite the shortage of private capital.

While most observers believe it is preferable that the FDIC limit any ownership positions or investment in restructured banks, some have taken the view that the FDIC should significantly expand its role as investor in problem institutions. Such observers view FDIC investments in failed banks as a form of capital forbearance that may be appropriate for banks having difficulties due to poor economic conditions.

The proponents of such a position believe the FDIC, or perhaps another agency, should operate in the manner of the Reconstruction Finance Corporation (RFC) of the 1930s. The RFC was empowered to make secured loans or to invest in preferred stock, capital notes and debentures of banks and trust companies. During its 15-year existence the RFC provided capital assistance to over 6,000 banks. Modern-day proponents of an RFC-type organization suggest that the entity should be authorized by Congress to close insolvent thrifts and banks expeditiously and that it provide financial assistance to distressed but viable institutions through loans or preferred stock issuances.

We question whether it is the role of the FDIC to shoulder the responsibilities of an RFC-style program. If another RFC is needed, that decision should be made by Congress. Further, it is not clear that such an

entity should be lodged in the FDIC. There is a clear difference between the investment in restructured banks occasionally made by the FDIC today and the type of investment required under an RFC-type plan. Currently, the FDIC helps to restructure failing or failed institutions, not financially distressed but viable institutions. There have been times when the FDIC has provided net worth certificates as a part of a capital forbearance policy (see Chapter 6), but such programs have been limited in scope and the result of Congressional action.

To summarize, the FDIC recognizes that there are public-policy concerns associated with FDIC investments in banks. In the large majority of cases the FDIC will avoid taking such a position. However, in some instances, generally for larger institutions, the FDIC views the benefits associated with lower costs and perhaps greater stability to be worth the costs associated with temporary ownership of part or all of the ongoing entity. In such cases the FDIC detaches itself from the day-to-day operation of the company.

Treatment of Problem Banks within Multibank Holding Companies

In the handling of failing banks within a multibank holding company, the FDIC encounters a unique set of problems. These problems arise because banks within a multibank holding company generally conduct business as though they were a single corporate entity, but in failure-resolution situations they must be treated by regulators as separate corporate entities.

Because there are few restrictions on transactions among banks in a multibank holding company, individual banks often behave as if they were branches within a single bank. In many cases this means that the bigger banks within the holding company generate most of the loan business and draw much of their funding from the smaller affiliated banks.

If the lead bank runs into difficulty and has to approach the FDIC for assistance, the FDIC faces a problem. If it handles the failure as an open-bank assistance transaction, or as a P&A as it generally prefers, this generally necessitates protecting all depositors and general creditors, including the affiliated banks. These banks then may be fully compensated for their advances to the lead bank despite the fact that they were knowingly funding the loans that led to the insolvency of that bank. Often, the only way the FDIC can have affiliated banks share in the losses is to handle the failure as a deposit payoff or an insured-deposit transfer. But these are generally more disruptive and more costly approaches to the problem.

This dilemma has proved to be a major concern in the handling of the large Texas multibank holding companies, which have operated basically as described above. The smaller banks within the holding companies served as funding sources for the lead banks. When the lead banks got into trouble the FDIC potentially faced letting some of the contributors to the problem off the hook or risking greater disruption and higher costs by conducting a payoff. Moreover, there is always the possibility that the affiliated banks could withdraw their funding and walk away from the problem before any FDIC action is taken.

In theory, this problem could arise whenever more than one bank is owned by a common parent. To date, this situation only has arisen in states where the banking structure is characterized by multibank holding companies. In states with full intrastate branching, the branches of any individual bank truly are part of one corporate entity and they share proportionately in the success or failure of the combined entity. There may be valid reasons why some states would prefer multibank holding companies to broader branching laws, and there are good reasons why banks within a multibank holding company should be able to transfer funds among themselves. Nevertheless, there is an inconsistency in allowing those banks to behave either as a single unit or as separate units, because this allows the banks to reap the rewards in good times and to saddle the FDIC with the losses in bad times.

The situation can take on even more drastic overtones if the holding company attempts to behave in a fraudulent manner by transferring bad assets at inflated values to one bank within the holding company and then letting that bank go. Similar results can be obtained by selling good assets of a problem bank to another part of the holding company at less than their full value. Each of these situations results in the transfer of losses from the holding company to the FDIC, without any burden being placed on the holding company.

Fraudulent transactions may not be the cause of the FDIC's losses in the large Texas multibank holding companies. Nevertheless, they represent a significant concern that is inadequately addressed under current law and procedures. A number of proposals have been advanced to help address these issues.

The Federal Reserve has long proclaimed its "source-of-strength" doctrine, which states that the holding company and its subsidiaries must come to the aid of a troubled bank affiliate. The validity of the source-of-strength doctrine has not been fully tested, and this uncertainty undercuts to some degree the forcefulness of the Federal Reserve's position. The Federal Reserve appears reluctant to have it tested in the courts, and in the most relevant cases that have arisen to date (e.g., Hawkeye Bancorporation and MCorp) the Federal Reserve has not obtained a judicial determination of this doctrine.

There are other concerns related to the source-of-strength doctrine. Its reliance on healthy banks and nonbank affiliates to rescue troubled banks clearly suggests that all units within a bank holding company effectively are part of a single corporate entity. This implies that banks should not be treated as separate corporate entities and that bank regulation and supervision should extend throughout the entire holding company, including the holding company itself and any nonbank affiliates or subsidiaries.

A doctrine that puts nonbank affiliates at risk for bank failures has many implications for our financial system. Many view it as an unnecessary extension of bank regulation and supervision into nonbanking areas. If there is no effective insulation between banks and nonbank affiliates, bank holding companies will be impeded in their ability to expand into nonbanking areas because their investments in nonbanking affiliates will always be in jeopardy. Further, nonbanking firms may be inhibited from entering the banking industry if all preexisting activities and investments will be at risk. This situation will reduce market efficiency, limit the ability of

banks to be viable competitors in the financial marketplace, and limit the ability to obtain new capital for the banking industry.

A more appropriate alternative would be to force banks within a multibank holding company, or banks owned by any common parent, to protect the insurer against losses from affiliated banks without extending the requirement to nonbanking affiliates or subsidiaries. This proposal would force affiliated banks to function as a single operating entity in bad times as well as in good times. It also would alleviate some of the concerns related to broad expansion of bank regulation and supervision to nonbanking activities. If effective firewalls were in place between banks and nonbank affiliates within a holding company, new activities still could be permitted, without unduly extending the federal safety net. The proposal could take one of two forms. Emergency consolidation of banks in a holding company could be required in the event of a failure of one of the banks. The FDIC previously requested such legislation. Alternatively, cross-bank guarantees could be required of banks to cover FDIC losses for any banks in that holding company.

Emergency consolidation authority, like the source-of-strength doctrine, represents a significant expansion of bank regulatory authority. In effect, it also allows regulators to apply the value of one corporate entity to cover losses of another corporate entity. This could be viewed as the price for obtaining a bank charter and/or federal deposit insurance, or it could be viewed as fair in light of the benefits such entities receive during good times. Emergency consolidation powers also imply either that it is not necessary to set up effective firewalls between banks in a multibank holding company or that it is not desirable to do so.

Cross-bank guarantees may be a less powerful enforcement tool, but they represent an effective way for the FDIC to protect itself from losses due to interaffiliate transactions by banks within a holding company. Cross-bank guarantees could serve to lessen the amount of capital entering the banking industry by potentially raising the costs associated with the operation of multibank holding companies. In this regard they may encourage the development of full intrastate branching and perhaps interstate branching as well. Cross-bank guarantees also are preferable to the source-of-strength doctrine because they better preserve the distinctions between separate corporate entities within a holding company.

Another possibility is to extend Sections 23A and 23B of the Federal Reserve Act to all banks owned by a common parent or just to banks within a holding company. Section 23A limits, but does not eliminate, transactions between banks and their nonbanking affiliates. The primary disadvantage of an extension of 23A restrictions is that it would limit the ability of banks to freely move funds as market conditions demand. However, this may promote the further development of branch banking.

Section 23B requires terms and conditions for interaffiliate transactions similar to those that would exist between unaffiliated companies. Moreover, there could be a requirement that lending between banks in a holding company be fully collateralized. Such restrictions also would limit the FDIC's exposure due to interaffiliate transactions without abandoning the legal reality that individual banks within a holding company are separate corporate entities.

A final alternative is to move to full interstate branching. Banking organizations that chose to expand through a branch network would only have one bank within a single holding company. It would be treated as such at all times. Funds could still move freely between different parts of the banking organization. Firewalls would only be necessary for transactions between banks and nonbanking affiliates. The downside of this proposal is that full interstate branching would involve federal override of state law. This is always viewed unfavorably by some of the proponents of the dual banking system.

In conclusion, cross-bank guarantees by banks owned by a common parent are the best alternative. The source-of-strength doctrine has significant drawbacks compared to the other alternatives. An extension of Section 23A of the Federal Reserve Act to cover transactions between banks owned by a common parent would limit the ability of banks to freely move funds as market conditions demand. Full interstate branching is desirable for many reasons, but will take time and will not necessarily eliminate multibank holding companies and the problems discussed in this section. Cross-bank guarantees are preferred over emergency consolidation powers since they can be just as effective in limiting the FDIC's exposure to losses, while providing the parent organization greater flexibility to deal with a financially troubled banking subsidiary.

Bank-Closure Policies

If banks were closed exactly at the point of insolvency and there were no costs associated with disposing of their assets and liabilities (through

liquidation or merger), then creditors would fully recover their claims and the level of deposit insurance coverage would not be an important issue. Indeed, if depositors were assured that this would always be the case there would be no need for or value in deposit insurance. While it is unlikely that bank closings always could be effected prior to real insolvency, even if laws were enacted to facilitate earlier bank closings, the importance of timely bank closings has been actively discussed in recent years. That issue has been closely linked to proposals to increase bank capital, to permit subordinated debt to satisfy a larger share of capital requirements, to impose supervisory constraints in a more timely manner, and to make greater use of market-value accounting.

In nonregulated industries there is no effort by any authority to assess a firm's solvency. A firm typically is placed into bankruptcy when it is unable to meet its obligations. Banks, on the other hand, are closed by their primary supervisor: the Comptroller of the Currency in the case of national banks and the state banking authority in the case of state-chartered banks. Sometimes closure is precipitated by liquidity problems. However, deposit insurance and access to Federal Reserve borrowing can prevent or forestall potential liquidity problems. Most bank closings occur after an insolvency determination.

There are many areas where precise determinations of market value are difficult, especially those related to nonperforming loans and foreclosed real estate. Even in areas where precise measurements are simple (marketable securities), accounting rules and insolvency definitions may prevent asset write-downs and delay an insolvency determination. The use of market-value

accounting would eliminate some of these measurement problems, particularly where assets are readily priced in the market and where valuation adjustments are largely a function of interest-rate changes. However, market-value accounting is not likely to solve the most basic valuation problem, adjustments related to poor credit quality.

Most bank failures occur as a result of loan losses, and here valuation problems are more difficult. Knowing when value has been lost, and by how much, and knowing this on a timely basis are extremely difficult. To avoid conflicts and lawsuits, bank supervisors generally have not been quick to force write-downs for the purpose of closing "marginal" insolvencies.

Once a bank is closed, problem assets, and even some that are largely problem free, are generally sold with some price concession. The "liquidation" value of an asset is less than its value in an ongoing institution. Uncertainty, the stigma that goes with a failure, and the selling expense virtually assure this. Thus, even timely closings will normally result in some loss. Fraud can cause sizeable losses, and as previously suggested, failures generate lawsuits related to nonperformance in certain areas and these contribute to additional failure losses.

Some have advocated that banks be closed while they still have book capital to eliminate or further reduce this loss. Whether insurance losses can be eliminated altogether probably is not important. Timely closings can serve to control losses to the deposit insurer. Timely closings also would minimize exposure to situations where owners or managers of insolvent institutions magnify their risk in an effort to become solvent and survive.

If we have learned anything from the thrift crisis of the 1980s, it should be the staggering cost these "perverse" incentives can impose on the insurer. This last point alone presents a strong argument in favor of timely closings.

It is not axiomatic that every insured institution should always and in all situations be closed as soon as it becomes insolvent. Situations can arise when such a rigid policy could substantially increase costs to the deposit insurer. In the early 1980s, for example, most S&Ls and savings banks were insolvent on a market-value basis, though not on an accounting basis, as interest rates rose to nearly 20 percent. If all of these institutions had been closed at that time the federal deposit insurance agencies would have faced costs in excess of \$100 billion. A more reasonable approach may have been to adopt appropriate sanctions to control the incentives that existed for excessive risk-taking in these institutions. Restrictions on asset growth, dividend payments, etc., can control these incentives if applied appropriately and strictly enforced. Such a policy could have allowed time for interest rates to drop, thereby improving the market value of thrift institutions without increasing losses to the deposit insurer. Nevertheless, exceptions to a general policy of prompt closings should be just that--exceptions. And even these should not be granted if it is not certain that effective controls are in place to keep the problem from getting worse. In the vast majority of situations there is no substitute for timely closure and no better way to send the right signals to the marketplace and minimize losses to the deposit insurer.

One problem that stands in the way of timely closure relates to the inclusion of loan-loss reserves as a part of a bank's primary capital. The

Comptroller of the Currency will not close institutions that have positive levels of "primary capital" as defined by regulation. In many instances a failing bank will deplete equity capital but still have primary capital due to its reserve for loan losses. If loan-loss reserves truly represent unidentified but already realized losses, then such institutions actually are insolvent and should be closed. This problem arose most notably with First Republic, but exists for a number of other banks as well. This obstacle to timely closure should be rectified as soon as possible. The bank's primary supervisor should make sure the bank takes appropriate reserves for loan losses, and a bank that does not have any equity capital should be declared insolvent and closed.¹⁰

Alternative Failure-Resolution Policies

In this section, five general alternatives to current failure-resolution policy are considered. In each case an assessment is made of the impact the approach would have on the FDIC's policy objectives. There are many other alternatives and variations on these five approaches, but the following discussion highlights a wide range of possibilities. These approaches include: (1) Conducting deposit transfers under a system of 100 percent deposit insurance coverage; (2) Raising the \$100,000 insurance limit; (3) Granting an explicit level of coverage for uninsured deposits; (4) Obtaining nationwide depositor preference legislation; and (5) Obtaining clear authority to distinguish between deposit and nondeposit claims.

Deposit Transfers Combined with 100 Percent Deposit Insurance

One alternative to current policy is to provide 100 percent deposit insurance coverage and handle all bank failures as deposit transfers. This proposal is quite different from providing 100 percent deposit insurance with P&A transactions.

Market discipline is reduced under 100 percent deposit insurance because all uncertainty is removed from presently uninsured depositors. They become completely protected. Combining 100 percent deposit insurance with deposit transfers as the preferred failure-resolution method would have the same effect of reducing risk for currently uninsured depositors. In addition, however, it would increase the risk facing nondeposit creditors and holders of contingent claims that become general creditors. The overall effect on market discipline would depend on which of these offsetting effects had the greater impact.

One could make a strong argument that there would be less market discipline on smaller and medium-sized banks. Most of the liabilities of these banks already are insured deposits. However, 100 percent deposit insurance would allow these institutions to bid for large deposit accounts and grow more rapidly. Much the same can and does happen through the use of brokered deposits. Nevertheless, raising large sums of money quickly would become even easier under 100 percent deposit insurance. This would put greater pressure on the supervisory process with respect to small and medium-size banks.

For large banks the effect on market discipline is unclear. There would be less depositor discipline, but these banks generally have substantial nondeposit liabilities which would be subject to greater risk. In the case of letters of credit, guarantees and other relationships involving bank commitments, bank customers would have to assess their risk more carefully. This could have a salutary effect on bank behavior without imposing the liquidity threat associated with deposit flights.

While the overall effects of this alternative on market discipline are unclear, the results for depositor discipline are unambiguous--there would be less. This has positive as well as negative aspects. While no depositor has lost money in an insured bank with assets greater than \$500 million, there is not absolute certainty they would not be exposed to loss in a future failure of a much larger bank. This uncertainty and the fact that it costs little to be sure and flee what appears to be a seriously troubled bank, even a large one, has mixed effects.

On the positive side, depositor discipline halts expansion by seriously troubled banks. Depositor discipline provides a check on bad bank policy and slow regulatory response. The downside is that deposit outflows may make it difficult for the troubled, solvent bank to turn itself around. The depositor has little incentive to stay with such an institution under the current system. Moreover, few believe that depositors are sufficiently clairvoyant or knowledgeable to anticipate bad asset problems. Discipline against risk-taking comes after-the-fact. However, the knowledge that depositors may run after-the-fact may persuade bank managers to behave more cautiously beforehand.

One benefit of this proposal is that it would reduce the FDIC's failure-resolution costs. Currently, in a P&A transaction all depositors and generally other general creditors are protected against losses. Under the proposal, nondeposit general creditors would share losses with the FDIC. All other aspects of these transactions could be handled the same way. So, to the extent that nondeposit creditors remained in the bank, the FDIC's losses would be reduced.

Some nondeposit creditors would choose to protect themselves by becoming depositors. This would not increase the FDIC's exposure relative to the current system because these creditors currently are usually covered in P&As. Moreover, their shift to depositor status would serve to increase the FDIC's assessment income.

Another positive aspect of the proposal is that failure-resolution policies would be more consistent and equitable. Depositors always would be protected against loss. Nondeposit liabilities would never be fully protected. Uninsured creditors would no longer find their degree of protection dependent upon the way the FDIC handled the failure.

A serious drawback of the proposal is that the FDIC would lose a great deal of flexibility in the handling of failures. This lack of flexibility may be particularly important in the event a large bank with significant nondeposit liabilities fails. Would the FDIC be willing to risk the possible adverse effects on the banking system by subjecting a large volume of nondeposit liabilities to losses? While this question is addressed at greater length in the next chapter, there are strong reasons why it may be undesirable

to force the FDIC into a position that could create instability in the banking system.

One final drawback of the proposal is that following enactment of 100 percent deposit insurance it would be difficult to roll back coverage if it were subsequently decided the disadvantages were too great. Many observers have had second thoughts about the increase in coverage from \$40,000 to \$100,000, but nonetheless recognize that politically it is unlikely it could ever be reduced (assuming that such a change is desirable). The same would be true if 100 percent deposit insurance were granted: it would be extremely difficult to rescind.

Overall, there are too many uncertainties about this proposal for it to be a recommended alternative to the current system. Greater equity, consistency and, perhaps, cost savings would result. The overall effect on market discipline is unclear. However, the policy's lack of flexibility, its likely irreversibility, and most importantly, its potential adverse effects on the stability of the banking system lead us to recommend against this alternative.

Raising the \$100,000 Insurance Limit

If we are fearful of the consequences of 100 percent deposit insurance, a less drastic approach would be to raise the insurance limit to some amount above \$100,000. There are two possible approaches. First, the limit could be raised to some explicit level of coverage, perhaps \$250,000 or more, for all

insured institutions. Second, full coverage could be provided up to some limit related to a bank's capital position.

To elaborate on the second approach, suppose insurance coverage for each depositor in a bank were set at the higher of \$100,000 or one percent of the bank's tangible capital. A bank with capital in excess of \$10 million could provide insurance coverage in excess of \$100,000 for each of its depositors. A bank with capital of \$1 billion could provide insurance coverage up to \$10 million per depositor. It would be necessary to monitor capital levels--these could be based on the most recent Call Report, subject to some supervisory adjustment (some percentage of nonperforming loans could be subtracted from capital). Some arrangement would have to be made with respect to insurance coverage for those banks whose capital declines. Small depositors would not have to be concerned with these details since the minimum coverage for any depositor would still be \$100,000. This approach, or one similar to it, would come close to providing full insurance coverage for most depositors.

One disadvantage of the second approach is that it would not be entirely equitable as it appears to favor larger banks by making it more certain that their depositors would be fully protected. In general, it appears that many of the disadvantages of 100 percent deposit coverage still would exist, just to a lesser extent. There would be a reduction in market discipline, as all uncertainty would be removed for depositors that gained explicit protection. Greater explicit coverage also would increase the FDIC's failure-resolution costs by some modest amount.

If this proposal were tied to a policy mandating the use of deposit transfers, the problems discussed in the previous subsection would reemerge. Nondeposit creditors would exert greater discipline on bank risk-taking, but the FDIC would lose a great deal of flexibility in the handling of bank failures. Again, there would be the question of whether the FDIC would be willing to risk the possible adverse effects on the banking system by subjecting a large volume of nondeposit liabilities to losses. Thus, as with the previous alternative, there are too many possible disadvantages associated with this proposal for it to be a recommended alternative to the current system.

Explicit Level of Coverage for Uninsured Deposits

There are other variations that would provide for greater consistency and equity in the handling of bank failures through higher insurance coverage. One option is to provide coverage of \$100,000 plus, say, 90 percent of deposits over \$100,000. The 90 percent payment to uninsured depositors could be viewed as a minimum payment that applied regardless of how the FDIC handled the bank's failure. Because the loss would not be catastrophic, the usual arguments against deposit transfers and payoffs--disruption to financial markets, interference with the payments system, delay, the tying up of claims, etc.--would be substantially diminished. Runs would occur. However, the fact that losses would still be limited might inhibit "stampedes." The mechanics of handling deposit transfers could be simplified. Ninety percent of all deposit balances could be immediately transferred and the remainder could be

subsequently adjusted. In most cases, checks in process probably could be honored.

There is no particular reason to adhere to a 90 percent payment on uninsured deposits; some other percentage may be preferable. The idea would be to arrive at a percentage that could retain some depositor discipline without imposing losses so high as to create stability concerns. Most of the problems associated with high explicit coverage would be eliminated. We could still have runs that would help close insolvent institutions in a timely manner. There would still be a basis for deposit-rate differences, which could provide some discipline against risk-taking. Highflyers would have some difficulty attracting large deposits. The FDIC also could handle all bank failures more uniformly. The FDIC might sometimes elect to make a cash advance to nondeposit creditors, though it would not be obliged to.

While this proposal is clearly preferable to the first two alternatives, it is not clear that it represents an improvement over current policy. The proposal seems to be more equitable because uninsured depositors would be treated more consistently. It also appears to provide a mechanism to obtain greater market discipline because uninsured depositors always would take a "hit" when a bank failed. However, the drawbacks of depositor discipline discussed in Chapter 4 remain a serious concern. It is not clear additional depositor discipline is a worthwhile trade-off if the cost is a greater threat of instability in the banking system. It may be preferable to look at ways to obtain greater equity and market discipline without increasing depositor discipline. The following subsections look at two such alternatives.

Depositor Preference

When depositor preference is applicable, the FDIC generally has tried to effect P&A transactions whereby only deposits are assumed by the acquiring bank. Nondeposit creditors are only entitled to receive liquidation proceeds after depositors are fully paid, and since the FDIC stands in the place of depositors, nondeposit creditors do not receive anything until the FDIC is fully repaid for any cash advanced or payment made to effect the P&A. Their subordinate position effectively subjects nondeposit creditors to greatly reduced protection.

Depositor preference applies to state-chartered banks in 23 states. Depositor preference has been particularly effective in cutting off contingent claims related to lawsuits, letters of credit and loan commitments, which in some instances could have imposed substantial costs on the FDIC. Most of the affected failed banks have not had significant unsecured, nondeposit financial liabilities, and they have generally been too small to be important in the off-balance-sheet activities conducted at larger banks. When the FDIC sought federal depositor preference legislation in 1986, it was the larger banks that objected strenuously. They argued that in a bank failure, creditors whose claims derived from letters of credit and other guarantees might expect to recover little, if anything, from liquidation, and the same would apply to foreign-branch deposits if the preference applied to domestic deposits or deposits subject to insurance. This, they maintained, would substantially hamper their ability to compete with foreign banks and nonbank financial institutions in these markets.

In principle, this problem could be avoided if large banks moved certain of their activities to the holding company, thereby removing them from the advantages or disadvantages of deposit insurance. However, most bank holding companies have little (frequently negative) equity apart from their investment in their principal bank. Few would be able to compete without their lead bank.

The enactment of nationwide depositor preference legislation would have many positive effects. It would reduce the FDIC's failure-resolution costs because the FDIC would be reimbursed on its claims before nondeposit creditors. It would be easier to adopt failure-resolution policies that enabled creditors to be treated more consistently. Depositors could be protected for banks of all sizes, while nondeposit creditors could be subject to losses more often. Market discipline could be increased without resorting to an increase in depositor discipline. There would be fewer concerns over the stability of the system if depositors were not likely to incur losses.

The biggest drawback of the proposal appears to be related to the substantial increase in costs for banks competing in certain markets. These additional costs may drive banks, particularly larger banks, out of certain businesses. Many off-balance-sheet activities of larger banks presently offer low profit margins. The prospect of greatly reduced returns to nondeposit creditors may increase costs enough to drive U.S. banks out of some of these markets. While it is not clear whether such a concern offsets the benefits associated with depositor preference, the next alternative looks at an approach that seeks to retain most of the benefits of depositor preference without imposing such high costs on nondeposit creditors.

Clear Authority to Distinguish between Deposit and Nondeposit Claims

In the 90 percent proposal, failures are handled as deposit transfers, insured depositors receive 100 percent of their claim, uninsured depositors receive 90 percent of their claim, and nondeposit creditors receive their pro rata share of liquidation proceeds. In depositor preference cases, failures also can be handled as deposit transfers, but uninsured depositors receive full protection and nondeposit creditors receive much less than a pro rata share of liquidation proceeds. A compromise between these two proposals would allow the FDIC the flexibility to protect all depositors without necessarily guaranteeing nondeposit creditors the same protection. That is, even if the FDIC decides to transfer all deposits to an acquiring bank, nondeposit creditors would not necessarily get any more, or less, than a pro rata share of recoveries.

The fact that the FDIC chooses to pay uninsured depositors more than they might receive in a payoff, does not mean the FDIC should have to provide a similar subsidy to nondeposit creditors. The assessment base distinguishes between uninsured deposits and nondeposit liabilities: deposit insurance premiums are paid on the uninsured portion of domestic deposits but not on nondeposit liabilities.

Absent a depositor preference statute, the FDIC has arranged transactions in which all deposits are assumed but general creditors receive only their "pro rata" payment. The FDIC has successfully utilized this type of transaction to deal with situations where otherwise the cost could have precluded a P&A transaction. The recent First Republic transaction is one

example. The legal basis supporting this approach has not been codified but arises from established common law. It is an area where guidance from Congress may be appropriate and beneficial. Statutory guidance might also avoid the uncertainty and litigation that often accompanies common-law concepts. This type of failure resolution offers considerable flexibility and satisfies most of the competing interests and policies.

This approach, assuming other aspects of insurance coverage remained unchanged, also would represent an improvement over present procedures. It would not have the potential disadvantages associated with 100 percent insurance coverage or depositor preference. It would not tie the FDIC's hands with respect to how failed banks are treated. The FDIC still could effect P&As or deposit transfers. From a cost and income standpoint the FDIC would be better off than at present. There still would remain some equity issues related to how the FDIC handled failures. Uninsured depositors would not receive full protection in a payoff but they would in a P&A or a full deposit transfer (as opposed to an insured-deposit transfer). Nondeposit creditors could receive full protection in a P&A but not in a deposit transfer.

The real advantage of this approach is that it gives the FDIC greater flexibility to separate deposit from nondeposit claims, thereby increasing the likelihood that nondeposit claims will not be fully protected when a bank fails. This will reduce the FDIC's costs and increase market discipline. It does not increase depositor discipline. It does not impose so rigid a rule that the FDIC cannot act differently if it makes a case that the stability of the system is at stake or that in a particular instance an alternative method is more cost-effective. Moreover, it does not impose as great a "hit" on

nondeposit creditors as would depositor preference legislation. This may enable the FDIC to retain the benefits of greater market discipline without driving banks out of certain markets. On balance, it appears preferable to the other alternatives and to current policy.

Conclusions

This chapter discusses the various policy objectives the FDIC seeks to achieve in determining the most appropriate failure-resolution method. The FDIC's primary objective is to maintain public confidence and stability in the banking system. Other objectives are: to maintain market discipline against excessive risk-taking by banks, to control the FDIC's costs, and to adhere to policies that are as equitable as possible.

While there are trade-offs between each of these primary objectives, the most basic trade-off exists between the desire to maintain market discipline against risk-taking and the need to maintain public confidence and stability in the banking system. As discussed in Chapter 4, there appears to be adequate market discipline against risk-taking by healthy institutions. It is only when a bank runs into financial difficulty that market discipline erodes and the incentive to take risks becomes significant. As suggested in Chapters 5 and 6, these incentives in problem institutions mean it is critical to maintain strong and effective supervision, which includes enforcement of appropriate capital standards and a general policy that calls for timely closure of insolvent institutions.

Market discipline and supervision work in tandem to control risk. As a bank's condition deteriorates, less reliance can be placed on market mechanisms and more reliance must be placed on the supervisory process. A basic conclusion that emerges from these chapters is that it is not clear that greater market discipline is necessary or desirable if the price is greater instability in the banking system. This is particularly true with respect to depositor discipline, which has the greatest potential to create instability in the system.

The view that the trade-off between stability and market discipline must be weighted heavily in favor of stability is the driving force behind the first two recommendations in this chapter. These recommendations are:

- o Timely closure of insolvent institutions, with a reliance on equity as the appropriate measure for determining solvency; and
- o Clear authority to distinguish between depositor and nondepositor claims in failure-resolution transactions. Such authority would give the FDIC greater flexibility without risking greater instability in the banking system.

The other three recommendations would increase the FDIC's ability to maintain adequate funding against potential problems. These recommendations are to:

- o Maintain current asset-disposition methods. The evidence to date indicates it is cost-effective to keep banking assets in the private sector.

- o Obtain authority to assess secured liabilities, because there is a direct relationship between the volume of secured liabilities and the FDIC's failure-resolution costs.

- o Require that all federally insured banks protect the FDIC against losses in any banks owned by a common parent. This proposal would eliminate the problems associated with affiliated banks operating as a single entity in good times, but as separate corporate entities, at the FDIC's expense, in bad times.

FOOTNOTES

¹Much of the discussion in this and the following section is also included in Bovenzi and Murton (1988).

²At times in the past the FDIC has paid uninsured creditors a portion of their claims at the time of failure. Cash outlays to uninsured creditors have been based on conservative estimates of what they ultimately would be entitled to receive. This variation of a payoff has been called a "modified payoff."

³Depositor preference statutes exist in 23 states, and apply to state-chartered banks in those states. These statutes elevate depositor claims over those of other general creditors and allow the FDIC the most flexibility in passing only deposit liabilities in P&A transactions, leaving behind the claims of other general creditors.

⁴The FDIC may provide these creditors less than full payment in a P&A transaction even in states without a depositor preference statute, although it has only exercised this authority on rare occasions. The FDIC takes the position that a creditor is only legally entitled to the amount the creditor would have received in a liquidation. The fact that other creditors (*i.e.*, depositors) may receive payments in full does not automatically entitle every creditor to payment in full.

⁵Capital Bank & Trust Co., National Association, was formed on October 30, 1987 as a bridge bank following the closing of Capital Bank & Trust Co. of Baton Rouge, Louisiana. On April 6, 1988 the bank was sold to Grenada Sunburst Systems Corporation of Grenada, Mississippi. In 1988, two bridge banks were established as part of the FDIC-assisted restructuring of First RepublicBank Corporation in Dallas, Texas.

⁶Basically, the essentiality doctrine allows the FDIC to provide assistance regardless of cost for any failed or failing bank when the FDIC determines that the bank's continued operation is "essential" to its community.

⁷Some contingent claims (*e.g.*, unwritten agreements, punitive damages) are eliminated as a result of a bank closing. These claims are not necessarily eliminated if the bank remains open. This may lead the FDIC to reject open-bank assistance as a cost-effective solution in certain instances.

⁸The FDIC had authority to use bridge banks at the time of the First City transaction. In that instance, however, it was determined that open-bank assistance was preferable.

⁹The FDIC's actual cost for open-bank and whole-bank transactions was only about 11 percent of the banks' total assets. The difference occurs because large banks typically cost much less as a percent of total assets, and the size of First City Bancorporation, in this case, allows it to dominate the results. Nevertheless, the average transaction had a cost closer to 20 percent of bank assets.

¹⁰Under risk-based capital, loan-loss reserves will not be included in Tier 1 capital. A similar issue that will arise is: Should a bank be closed when it depletes Tier 1 capital or both Tier 1 and Tier 2 capital? From the insurer's standpoint the absence of Tier 1 capital probably justifies the closing of the institution.

¹¹Presently, foreign deposits are insured if they are payable in the U.S. In effect, banks can decide to have foreign deposits insured by making them payable overseas and in the U.S.

Chapter 8

ISSUES RELATED TO HANDLING LARGE BANK FAILURES

Introduction

One of the more important ingredients of any developed economy is a structure that is capable of accommodating insolvencies in an orderly and equitable manner. In the United States and many other countries, bankruptcy laws have been developed to meet this need. These laws have provided a framework to protect the interests of creditors and owners while the operations of a firm are reorganized or, if appropriate, liquidated.

As a general rule, bankruptcy laws have worked well to protect claimants and minimize disruptions when corporate firms become insolvent. In recent years, we have seen a number of very large enterprises reorganized under the protection of the bankruptcy laws, while productive capabilities and values have been maintained. For better or for worse, however, public policy makers during the 1970s made a decision that certain very visible organizations could not be effectively handled under these laws; i.e., Lockheed Aircraft Corporation, the Chrysler Corporation and New York City were judged to be "too-large-to-fail." With the 1984 assistance package arranged for Continental Illinois National Bank and Trust Company, the

"too-large-to-fail" focus shifted from industrial and municipal organizations to banks.¹

The purpose of this chapter is to discuss the issues related to "too-large-to-fail" ("TLTF") within the context of banking. The ultimate goal is to identify a working definition of "TLTF," explore whether this doctrine is compatible with good public policy and, where appropriate, make recommendations to accommodate changes.

Background

Since the mid-1960s, the FDIC generally has preferred handling failed banks by means of a closed-bank purchase-and-assumption transaction ("P&A"). A P&A has certain advantages over alternative courses of action: it minimizes disruption to bank customers, retains franchise value and provides a means to segregate general creditor claims from those of subordinated creditors and owners. However, a P&A transaction always cannot be arranged under reasonable terms; in these cases, the FDIC has either paid depositors off to the statutory limit or, less frequently, provided assistance to keep the bank from closing.²

While there arguably was not an explicit statutory requirement to factor costs into failure-resolution decisions until passage of the Garn-St Germain Act of 1982, the FDIC has used an explicit "cost test" since 1951.³ This cost test requires that assistance provided in connection with a failing or failed bank must be less costly than a payoff and liquidation of the

institution; as discussed later, the FDIC can disregard the cost test only in cases when the institution is judged to be "essential." The cost test does not require the FDIC to choose the least costly option.

Application of the cost test has tended to discriminate in favor of larger institutions in terms of how the FDIC is likely to resolve a failure situation--i.e., small banks are more likely to be paid off, whereas larger institutions have a higher probability of being handled in a manner that conserves general creditor claims. There are several reasons for this. First, larger institutions tend to have larger relative franchise values. Second, many small banks are located in states that restrict geographic expansion; this tends to reduce the number of qualified acquirers and further reduces franchise value. Finally, because of the extensive disclosure requirements applicable to publicly traded companies, the FDIC is likely to become involved at an earlier date than is the case with closely held institutions; this tends to reduce costs in general, and makes an acquisition more attractive.

However, as pointed out in Chapter 7, there are legitimate policy objectives other than cost that need to be considered. The FDI Act recognizes this fact, and accommodates handling bank failures in ways that do not meet the cost test; this is accomplished by the Board of Directors of the FDIC finding that a bank is "essential" to the community served by the bank.

About the time the FDIC began using a cost test, statutory authority was granted to provide assistance directly to an open bank " . . . when in the opinion of the Board of Directors the continued operation of such bank is

essential to provide adequate banking service in the community."⁴ The Garn-St Germain Depository Institutions Act of 1982 broadened this authority, permitting the FDIC to grant assistance on either an open or closed basis, provided that such assistance meets the cost test outlined above. To otherwise grant assistance, the Board of Directors must find the bank to be "essential" to the community.⁵

The FDIC granted open-bank assistance in five instances between 1971 and 1980. In two of these cases (Bank of the Commonwealth, in 1972, and First Pennsylvania, in 1980), the essentiality finding was based on the size of the bank, rather than on the nature of services provided to the immediate community. In two of the other instances (Unity Bank and Trust, in 1971, and Farmers Bank of the State of Delaware, in 1976), the finding was based on services provided to a more narrowly defined community. In the final case (American Bank and Trust Company of Orangeburg, S.C., in 1974), assistance was provided as a temporary source of funding until a P&A could be arranged. The FDIC probably could have provided this assistance under the separate authority to provide assistance to facilitate the acquisition of a failing or failed bank, thus avoiding the necessity of an essentiality finding.⁶

Since the Garn-St Germain Act amendments, the FDIC has made an essentiality finding in two cases.⁷ In each instance, the basis of the finding was that a failure and statutory payoff could threaten the stability of a broadly defined market. One transaction (Continental) was on an open-bank basis, while the other (First National Bank and Trust Company of Oklahoma City) resulted in a closed-bank P&A transaction.

The first and most controversial use of this authority occurred in 1984, when the FDIC arranged an open-bank assistance package for Continental Illinois National Bank and Trust Company--then a \$44 billion institution based on assets. After having been regarded as one of the best-managed banks, perceptions of Continental began to change when its linkages to Penn Square became known in 1982, culminating in an inability to renew large certificates of deposit beginning in May 1984. The FDIC's immediate response was to arrange \$2 billion in subordinated financing for the bank (\$1.5 billion from the FDIC and \$0.5 billion from a consortium of large banks), and to provide an assurance that the bank would be handled in a way that depositors and other general creditors of the bank would not be subjected to loss. No such statement was made with respect to creditors of the holding company.

From the beginning, two things were clearly understood. Since Continental had only about \$3 billion in insured deposits, any transaction--open or closed--that kept depositors intact could not be justified on the basis of the cost test. It was equally clear that the U.S. Government would not permit a bank of this size and international importance to be paid off at that time. It must be remembered that the FDIC had completed its "modified-payoff" experiment earlier that year, and both domestic and foreign markets were not certain how the FDIC and, more generally, the U.S. Government would handle the insolvency of a large bank.⁸ Thus, decision-makers were unwilling to risk the consequences of paying off Continental.

There was a strong preference on the part of the FDIC to handle Continental by means of a closed-bank P&A transaction. To this end, several banks and a private investor group performed limited due diligence during the

summer of 1984. The banks were reluctant to submit any bid except on a management consignment basis, fearing that Continental's funding problem would adversely affect their own institutions. The one bid that was submitted to acquire Continental would have required incurring costs exceeding what the FDIC determined could be reasonably justified.

Thus, there were only two viable alternatives available to the FDIC: handle Continental on a closed-bank basis, arranging a P&A with a phantom bank "owned" by the FDIC; or attempt to arrange open-bank assistance that would limit the benefits to owners and holding company creditors.

Virtually every factor favored an open-bank transaction. Since the FDIC cannot own common or voting stock in a FDIC-insured bank and bridge bank authority was not available at that time, it would have been awkward to handle Continental on a closed-bank basis.⁹ Additionally, the nonbanking assets of Continental Illinois Corporation (the holding company) were probably sufficient to satisfy holding company creditors, with perhaps something left over for preferred stockholders. Moreover, a closed-bank solution would have invalidated about \$1 billion in tax-loss carryforwards related to the restructuring.

In September 1984, the FDIC finalized the permanent assistance package for Continental. Under the program, the FDIC provided capital to, and purchased certain assets from, the bank in exchange for a minimum 80 percent common ownership of the holding company. Ownership by the FDIC above the 80 percent level was made dependent on the level of losses experienced on the purchased assets; the current expectation is that losses on these assets will

exceed the level necessary to provide 100 percent of the common stock to the FDIC.

The Continental transaction was widely perceived as an indication that some bank are too-large-to-fail, and that the federal safety net would be extended to holding company creditors. This perception is incorrect. As pointed out earlier, an examination of the factors surrounding the transaction indicate that, given the decision not to pay off Continental, the structure served to minimize costs to the FDIC. Moreover, holding company creditors most likely would have been made whole even if the bank had failed. The available evidence suggests that the only group with claims on the holding company that benefited from FDIC assistance were the preferred stockholders; this class of ownership represented only \$80 million out of a total bank capitalization of over \$1 billion.

In summary, there are at least three messages that should have been conveyed by the way the FDIC handled Continental. First, Continental was not too-large-to-fail; however, it was too important to pay off at that time. Secondly, the FDIC will attempt to minimize costs even in situations when it is deemed appropriate to make an essentiality finding. Finally, the FDIC is sensitive to minimizing any benefits from assistance accruing to holding company creditors and owners; the way subsequent large failing-bank situations supports this statement. As indicated above, unfortunately these messages were not understood by the financial markets at the time the Continental transaction was consummated.

The next essentiality finding occurred in 1986, with the closed-bank purchase-and-assumption transaction of the \$1.6 billion The First National Bank and Trust Company of Oklahoma City by a newly chartered subsidiary of First Interstate Bancorp of Los Angeles. First Oklahoma Bancorporation, the parent of First National Bank and Trust Company, had explored the possibility of open-bank assistance with the FDIC. A satisfactory transaction could not be arranged, primarily because of the heavy debt burden relative to nonbanking assets in the holding company. Nevertheless, the FDIC felt that a payoff was impractical and bids were requested from third parties. First Interstate submitted the only acceptable proposal, at a cost in excess of the FDIC's estimate of the cost of payoff and liquidation.

Essentiality findings also have been made in situations where the amount of assistance would meet the provisions of the cost test, but for other reasons assistance could not be granted without such a finding. The first such finding was made in connection with the open-bank assistance granted to the subsidiary banks of First City Bancorporation of Houston. First City, with banking assets of about \$12 billion, had approached the FDIC early in 1987 regarding FDIC assistance to facilitate the acquisition and recapitalization of the company. The FDIC subsequently solicited bids on a wider basis and in September of that year, announced preliminary approval to a plan submitted by a group lead by Robert Abboud, former CEO of First Chicago.

Under the plan, the investor group agreed to inject \$500 million in capital in exchange for assistance from the FDIC, estimated to be about \$950 million. Additionally, creditors and preferred stockholders of the holding company agreed to concessions; the common equity ownership were left with minimal value. The transaction was consummated in April, 1988.

The First City transaction was justifiable under the provisions of the cost test. However, some of the subsidiary banks were not in immediate danger of failing, and the FDIC cannot provide assistance to such banks unless extraordinary conditions exist. Since some of the FDIC assistance likely would flow to some of these "solvent" banks, it was necessary to make an essentiality finding.¹⁰

The latest use of essentiality for this purpose occurred in the fall of this year when the 40 subsidiary banks of First Republic Bancorporation, a \$30 billion holding company located in Texas were closed and combined into a single bridge bank formed for this purpose. This represented the largest closed-bank transaction ever conducted in the United States.

First Republic, which was the result of a 1986 merger of InterFirst Bancorporation and Republic Bank Corporation of Texas, began to experience funding problems in early 1988, as the market reacted negatively to larger than expected losses. In response to a request from the company, the FDIC placed \$1 billion of subordinated funds in the two larger, more troubled bank subsidiaries located in Dallas and Houston, and provided assurances that all the subsidiary banks would be handled in a manner that would not expose general creditors of the banks to loss. In exchange for this assistance, the FDIC received a pledge of available holding company assets and a series of cross-guarantees and subordination agreements involving all the subsidiary banks. Because the assurances provided by the FDIC protected all subsidiary banks, some of which could not be determined to be in danger of failing, an essentiality finding was made to accommodate this interim assistance package.

The management of First Republic developed and submitted to the FDIC an open-bank assistance plan; the FDIC at the same time solicited proposals from those interested parties that could safely absorb \$30 billion of banking assets. The lowest-cost proposal was submitted by NCNB Corporation of North Carolina, and was based on the closure of the insolvent subsidiary banks. This transaction was well within the requirements of the cost test.

Issues

There are a variety of lessons to be learned from the evolutionary process that lies behind the current rules and policies regarding the handling of failing and failed banks. First, expected cost to the FDIC has become the threshold calculation for determining whether a particular situation deserves special consideration. While the appropriateness of the definition of the cost test and the administration of this requirement by the FDIC may be open to question, few would argue that cost considerations should not be important in decisions regarding insurance disbursements.

Moreover, there are situations where the appropriate course of action cannot be justified on the basis of the normal cost calculations. These situations are recognized in law, and are treated in the "essentiality" sections of the FDI Act. The safeguard is that a defensible reason for disregarding the cost test must be articulated, and is open to public scrutiny.

These basic observations and a review of how failed banks have been handled lead to several of conclusions. First, the term "too-large-to-fail"

clearly is not appropriate. What is important is that an institution is handled in a way that cannot be justified by the usual cost calculation, not whether the bank is handled on an open or closed basis or, for that matter, on the size of the institution. In fact, most of the open-bank assistance transactions involving independent banks since the beginning of 1986 were arranged for smaller institutions. Thus, the most descriptive phrase appears to be "too-important-to-pay-off."

The second conclusion is that the ability to make decisions with respect to assistance based on factors other than cost has been, and most likely will continue to be, a fact of life--i.e., the "too-important-to-pay-off" doctrine likely is here to stay.

However, there clearly are good arguments to be made on both sides of the controversy regarding this issue. Theoretically, there should be consistency in the treatment of all banks, and the banking system should be able to operate under a defined set of rules, even if those rules mandate losses to creditors if an institution should fail.

On the other hand, banks do perform a set of functions that are not duplicated by any other single type of financial institution. In recognition of the "specialness" of these functions, banks have operated under unique rules since banks as we know them today came into existence, and deposit insurance was developed to deal with the instability banking has exhibited during times of economic stress.

The phenomenon of protecting banks from default is not peculiar to the United States. As the discussion in the appendix to this chapter shows, most countries follow policies that afford de facto or de jure 100 percent guarantees to bank depositors. For better or for worse, as more countries explicitly or implicitly protect depositors, as banking becomes more international in nature, and as technology increases the ability to transfer funds internationally at the speed of light, the more difficult it will be for the United States not to retain flexibility with respect to handling bank insolvencies.

This arrangement is not inconsistent with good public policy. There is no system that can function with a rigid set of rules without a means to accommodate exceptions. While consistency and fairness are very important, society has demonstrated a willingness to accommodate exceptions in cases where there is sufficient justification. In general, society would need a means to periodically review the efficacy of the rules and, more to the point, sufficient information to evaluate the exception system. Although not perfect, the cost test/essentiality framework meets the requirements set forth above.

In summary, the deposit insurance system has to have the flexibility to accommodate more than short-term cost minimization. It would be counterproductive to design a system that does not recognize this fact.

Given this conclusion, there are two more issues to be addressed. First, if handling bank failures is to involve broader issues involving macroeconomic and international stability questions, some have questioned

whether the deposit insurer is the appropriate place to vest this responsibility. As much as anything, this question is raised because, whether or not there is an explicit deposit insurance system, in most countries bank insolvencies are handled by the central bank or ministry of finance (Treasury).

This question can be answered on a variety of levels. First, it should be noted that the FDIC has had the responsibility for handling all bank failures since 1934, and the system has worked reasonably well. Second, the relationship of the government to business, and of the monetary authority to banks, is much different in the United States than in many other countries. In general, in the United States the relationships between business and government are conducted on an arm's-length basis, whereas in many other countries tradition plays a much more important role. Thus, the arrangements that work in other countries will not necessarily be efficient in the United States.

Another consideration is the need to act swiftly in an impending bank failure. Bank liabilities for the most part are short-term, and can "run" on short notice. To avoid panic and the likelihood of contagion, and to preserve franchise values, the ability to act rapidly needs to be maintained. This argues for keeping the resolution of bank failures out of an environment subject to short-term political influence. Moreover, responsibility for handling bank failures creates an interest in maintaining or enhancing asset values to minimize losses. An interest in maintaining asset values presents a clear conflict-of-interest for the monetary authority.

The conclusion is that the existence of a separate insurer is appropriate. If accepted, this raises a question as to the adequacy of the current funding sources of the FDIC. This is the major topic of the next section.

Funding Deposit Insurance

The FDIC was created to operate very much like a private casualty insurance company. Under the permanent insurance fund authorized by the Banking Act of 1933 (the Glass-Steagall Act), insured banks were required to maintain a capital investment in the FDIC equal to one percent of insurable deposits, and assessments were structured in a manner that would effectively pass operating expenses and insurance losses directly to insured banks.¹¹ Although the Banking Act of 1935 substantially changed the methods of capitalizing the insurance agency and divorced assessment levels from losses, the concept of an insurance fund was maintained. Subsequent amendments to the FDI Act have tended to move the funding mechanisms toward the provisions of the original legislation.

There are advantages to operating an insurance function with a fund, rather than on a pay-as-you-go basis. The most direct advantage is that there are resources available to absorb unanticipated losses; thus, it provides a vehicle to permit abnormal expenses to be absorbed by the insured entities over a longer period of time. Moreover, the existence of a fund tends to create the correct incentives by providing a readily observable measure of performance; decreases in the net worth of the insurance agency have to be

explained and, to the extent that this is reflected in an increase in premiums, it becomes of concern to the insured entities.

However, there are situations where the existence of a fund can create perverse incentives. In a manner similar to that faced by bank and thrift owners, the closer the insurance agency is to insolvency, the greater is the incentive to take risks. This phenomenon explains the way in which FSLIC approached dealing with problems in the thrift industry in the early 1980s. If thrifts could grow out of the problems, the FSLIC would become solvent and viable; if the strategy did not work, the insurer would just become more insolvent.

Thus, ensuring the solvency of the insurance agencies is crucial for effective functioning of the system. The purpose of this section is to evaluate the current system, and to suggest changes that will make revenues more responsive to changing expense and loss rates.

The Current System

The major sources of income to the FDIC have been interest on its portfolio of U.S. Treasury securities and assessments collected from insured banks.

Premiums ("assessments") are collected from each insured bank equal to 1/12 of one percent of assessable deposits (essentially deposits in domestic offices), less an adjustment for uncollected funds ("float"). After deducting

operating expenses and insurance expenses and losses from gross assessment income, 60 percent of the remainder ("net assessment income") is rebated on a pro rata basis to insured banks in the form of a credit against future assessments. In cases where expenses and losses exceed gross assessment income, the deficiency is carried forward and applied against future assessments.

In 1980, the FDI Act was amended in a manner that links the permissible rebate to the ratio of the fund to "insured" deposits. Specifically:

- o If the ratio is less than 1.10 percent, the rebate will be decreased by an amount necessary to maintain the 1.10 percent ratio, but in no case will the rebate be less than 50 percent of net assessment income.
- o If the ratio exceeds 1.25 percent, the FDIC has the option of increasing the rebate to maintain the ratio at not less than 1.25 percent.
- o If the ratio exceeds 1.40 percent, the rebate will be increased by an amount to maintain the ratio at not more than 1.40 percent, but in no case will the rebate exceed 100 percent of net assessment income.

This system has worked well, especially during times when losses and expenses generally were less than assessment income. However, in periods of significant losses, the current system limits the ability of the fund to

regain the desired relationship to deposits, except over a relatively long period of time. Moreover, once losses have surpassed the level necessary to ensure that there will be no rebate in the near future, the incentive for banks to be concerned with industry losses is reduced. At the end of 1988, the loss carryforward available to the FDIC will equal about four years of expected assessment income.

Proposed Revisions to the Assessment System

As indicated earlier, the original permanent deposit insurance fund included an assessment system that effectively would have passed insurance expenses and losses directly to insured banks. The public debates and hearings held in connection with the 1933 Act clearly indicate that Congress did not intend to put taxpayer funds at risk to support the banking system, and designed the premium system to accomplish this goal. However, Congressional sentiment apparently changed during the ensuing year. Part of the rationale for the Banking Act of 1935, which mandated the 1/12 of one percent assessment rate, apparently was that the banking system was still fragile, and needed some insulation from the possibility of large assessments if bank failures and losses were to dramatically increase from the 1934 levels. While this scenario did not materialize, the assessment system, with some revisions, has survived.

The proposal presented here would involve implementing a structure that is very similar to that envisaged in the 1933 Act. The proposal is as follows:

Assessment Rate. Total assessments each year would be calculated as one-third of the sum of operating expenses and insurance expenses and loss not recovered from prior years plus current expenses and losses, lagged one year. For example, assuming there will be about \$4.7 billion in loss carryforwards remaining after 1988 assessment income has been credited, and there is a \$5.5 billion loss during this year, assessments for 1989 would be \$3.4 billion $([4.7 + 5.5]/3)$, with a carryforward of \$6.8 billion $(4.7 + 5.5 - 3.4)$ available for the 1990 assessment calculation. Table I presents a comparison of the levels of assessment income under the current and proposed plan for the years 1984 through 1989.

TABLE I
Actual and Proposed Assessment Income
(\$ billions)

<u>Year</u>	<u>Losses + Expenses</u>	<u>Gross Assessment Rate</u>	
		<u>Current System</u>	<u>Proposed System</u>
1984	1.99	1.3	1.1
1985	1.96	1.4	1.4
1986	2.96	1.5	1.6
1987	3.23	1.7	2.1
1988*	5.3	1.8	2.5
1989*		1.8	3.4

*Estimated

Clearly, an assessment scheme based on current losses will take a larger percentage of industry income in the short run during periods of high or rising losses. On the other hand, assessments will decrease more rapidly in an improving environment. Nevertheless, to control assessment costs, it may be desirable to place ceilings both on increases in assessments and on the maximum permissible level of premiums. These limits could be in terms of

basis points of the assessment base (e.g., maximum increases set at 1/12 of one percent of the assessment base during any 12-month period), or as a percentage of industry profits (e.g., total assessments for any year cannot exceed 20 percent of aggregate industry profits). Both approaches have merit, but need to be exposed to a variety of viewpoints before a recommendation should be made.

Assessment Base. Since the definition of what are assessable liabilities determines the incidence of deposit insurance assessments, this topic is of intense interest to the industry. Currently, the assessment base consists of domestic deposits (i.e., deposit liabilities payable in the U.S.), reduced for float. Beginning in 1961, uniform percentage deductions for float became available to banks in lieu of tracking actual balances. The base is reported as the average of the balances at the end of the first and second quarters and the third and fourth quarters (i.e., a two-point average).

The first two suggestions for change in the assessment base are technical in nature and relate to elimination of the float deduction, and moving from a two-point quarterly to a daily average calculation of the base.

The deduction for items in the process of collection (float) makes little sense from an economic perspective. First, the availability of a uniform percentage deduction ensures that a maximum deduction will be available; banks with low float will use the formula, whereas banks with an above-normal level will use the actual figures. Of more significance, what is referred to as float has a counterpart on the liability side of the balance sheet that, for deposit insurance purposes, is treated as any other deposit.

Thus, the float deduction represents a reduction in the assessment base, without a reduction in the FDIC's liability on an individual bank basis.

The method of averaging currently employed can result in distortions due to irregular changes in deposits over time, and invites banks to adjust quarter-end financial statements to minimize assessment costs. Moreover, as the system moves more toward protecting only depositors in P&A transactions and relying more on the discipline of nondeposit creditors, it becomes more important to accurately measure the assessment base.¹² Since the cost of maintaining the records necessary to calculate daily averages has decreased for virtually all banks, it is recommended that a daily average of the assessment base be used for purposes of calculating premiums.

A more substantive recommendation pertains to extending the assessment base to include secured borrowings; i.e., borrowed money raised in the normal course of business that has a claim on assets ahead of insured deposits. The most significant amounts of funding that would be covered under this recommendation are repurchase agreements and borrowings from the Federal Reserve or Federal Home Loan Banks. These borrowings clearly are superior to insured deposit accounts and, as pointed out in Chapter 7, can increase FDIC costs in failed-bank situations. Thus, there appears to be no good reason why the FDIC should not collect assessments on these liabilities.

A more complicated issue relates to placing so-called foreign deposits in the assessment base.¹³ Since virtually all foreign deposits are held by large banks, and since these institutions are more likely to be handled in a way that protects most creditors, there is a very good argument that these

deposits should be assessed. On the other side, there are convincing arguments that favor not assessing foreign deposits. First, it is argued that the increased costs associated with assessments would reduce the ability of U.S. banks to compete in foreign markets and adversely affect their ability to promote exports from the U.S. Second, there is reason to believe that many banks would convert foreign offices to subsidiary banks, thus perhaps substantially reducing the amount of foreign deposits subject to assessments. Finally, there is a strong feeling that if foreign deposits are assessed, they also should be insured; this raises a variety of issues, including the reaction of foreign governments to U.S. banks offering insured deposits in competition with domestic banks, and the liability of the FDIC in cases where a foreign government seizes a bank's assets held in the host country without honoring local claims against the bank.

It is very difficult to assess the relevant weights for each of the arguments or, in some instances, to fully understand the implications. Thus, it is premature to make a firm recommendation regarding the ability to assess of foreign deposits.

Rebates. Under the proposed assessment scheme, the only source of growth in the fund would be from investment income. That is to say, losses and expenses would be recouped over a reasonably short period of time by assessment income, with investment income becoming the only source to increase the fund.¹⁴ In periods of favorable loss experience, the fund will increase, and it is possible that its growth could outstrip growth in the assessment base. As indicated earlier, the 1980 amendment to the FDI Act provided a vehicle to adjust rebates to reflect changes in the relationship of

the net worth of the FDIC to "insured" deposits. Within the context of the current proposal, there are no reasons why insured banks should not benefit in cases where the fund, in some sense, is judged to be at an acceptable level.

Recognizing that actuarial precision has never been a part of setting premium rates or assessing the adequacy of reserves for deposit insurance purposes, the following changes are suggested as a reasonable way to approach the rebate question. First, it is suggested that the basis of assessing the relative adequacy of the fund be shifted to the assessment base from "insured" deposits. Without the expenditure of considerable resources, it is impossible to get a good measure of the volume of insured deposits in the system. Moreover, the assessment base more accurately defines the liabilities that are most likely to be made whole in bank failures.

Second, it is suggested that rebates be handled on a sliding scale that is determined by the size of the fund relative to the assessment base. For example, the following schedule by historical standards would provide for a reasonably generous fund/base relationship, while providing for rebates to banks under reasonable circumstances:

- o If the ratio of the fund to the assessment base is one percent or less, there will be no rebate.

- o If the ratio is between one percent and 1.10 percent, the rebate shall be the lesser of an amount necessary to reduce the ratio to 1.0 percent or 40 percent of investment income.

- o If the ratio is between 1.10 percent and 1.25 percent, the rebate will be the lesser of an amount necessary to decrease the fund to 1.0 percent or 60 percent of investment income.

- o If the ratio is between 1.25 percent and 1.40 percent, the rebate will be the lesser of an amount necessary to reduce the ratio to 1.0 percent or 80 percent of investment income.

- o If the ratio is 1.4 percent or higher, the rebate will be the lesser of an amount necessary to reduce the ratio to 1.0 percent or 100 percent of assessment income.

The rebate could be made available as credits to future assessments or cash payments.

Liquidity. The FDIC always has had authority to borrow to meet liquidity needs. The 1933 Act explicitly authorized the FDIC to issue " . . . notes, debentures, bonds, or similar obligations . . . " necessary to conduct insurance operations. The 1935 Act directed the Secretary of the Treasury to purchase up to \$975 million of these obligations; in 1947, the specific authority to issue direct obligations was deleted from the FDI Act, but specific authority to borrow up to \$3 billion directly from the Treasury was granted. The FDIC never has exercised this authority.

The FDIC frequently has arranged transactions in a manner that has tended to minimize cash outlays. On numerous occasions, the FDIC has issued notes in lieu of cash. In most instances, these notes have not been

marketable; in the two instances that marketable notes were issued--to Goldome Savings Bank and Meritor FSB--exemptions under the securities laws were not granted by Treasury, thereby affecting their marketability; and the notes were redeemed by the FDIC for cash.

Perhaps the most important source of borrowings to the FDIC has been assumption of a bank's Federal Reserve Bank indebtedness that has been arranged as part of failed- or failing-bank assistance transactions. Beginning with the Franklin National Bank P&A in 1974, virtually every instance where the FDIC has had to grant assistance to a large bank, assumption of Federal Reserve Bank indebtedness has been involved.

There clearly is a need to provide for the deposit insurer to have access to sources of liquidity. Access to liquidity is consistent with the operations of any insurance company so that cash needs can be met without sale of assets. Thus, it is recommended that the deposit insurer be given explicit authority to borrow from either the Treasury or the Federal Reserve System. To minimize delays, the amount and term, within specified limits, of such loans should be at the sole discretion of the FDIC. The interest rate, however, would be set by statute (e.g., the 90-day Treasury Bill rate plus 50 basis points).

Entrance Fees. Although the Banking Act of 1933 envisaged maintenance of a capital investment by insured banks in the FDIC equal to one percent of deposits, subsequent revisions have effectively removed any requirement that institutions gaining FDIC insurance contribute anything to the fund. Thus, a depository institution converting to FDIC insurance is liable only for future assessments.

Before 1980, this scheme presented few problems. Statutorily, rebates were based on expenses and losses, without regard to the relationship of the fund to any measure of exposure. While there has been a number of operating institutions that have gained insurance since 1980, the volume of new deposits brought under FDIC insurance has been minimal. Moreover, because of the losses recorded in the 1980s, the effect on rebates has been minimal.

However, the recommended changes to the system contemplates a more immediate and direct relationship between losses and assessments and a rebate system that is linked to the relationship of the fund to the assessment base. Moreover, there is a likelihood that institutions possessing larger resources (primarily FSLIC-insured thrifts) will seek FDIC insurance. This argues for an entrance fee for institutions that have previously operated without FDIC insurance.

It is recommended that institutions converting to or otherwise gaining FDIC insurance pay a one-time fee equal to the ratio of the fund to the assessment base at the time of conversion, times the volume of assessable liabilities brought into the system. This fee could be payable upon entrance to FDIC coverage, or spread over a longer period (e.g., a cash deposit equal to the fee upon admittance, but credited to the fund over a five-year period).

Summary and Conclusions

The FDIC always handled the failure of larger banks in a way that provides full protection to depositors and other regional creditors.

Nevertheless, the open-bank assistance provided to Continental Illinois National Bank and Trust Company focused the "too-large-to-fail" discussion on banking and the way the FDIC approaches failing- and failed-bank situations.

Since 1951, the FDIC has followed a set of rules that has forced identification of situations that are handled outside of normal criteria. Specifically, the FDIC has made a finding that an institution is "essential" to the community to justify any transaction that is more costly than a statutory payoff and liquidation. This system has had two effects. First, the form of the cost test is biased toward purchase-and-assumption or similar transactions in cases where there is a significant amount of franchise value; since this is more likely to occur in large banks, this translates into a higher likelihood of handling larger banks in a manner that protects all general creditors. Second, the FDIC is forced to explicitly justify any action that cannot be rationalized under the cost test.

Since 1982, an "essentiality" finding has been made in only two instances where the cost test could not be met: Continental Illinois and First National Bank and Trust Company of Oklahoma City. One of these institutions was handled on an open-bank basis (Continental), whereas the other was handled as a closed-bank purchase and assumption. This record, interpreted within the context of the rules under which the FDIC operates, leads to a couple of conclusions.

First, the term "too-large-to-fail" is inappropriate in banking; a more appropriate phrase is "too-important-to-pay-off."

Second, the ability to deviate from decisions based solely on the cost test has had a long history and, more importantly, is likely to continue to be a fact of life--i.e., the "too-large-to-pay-off" doctrine in all probability is here to stay. There always will be certain situations where an individual bank will be perceived to be too important to macroeconomic or international stability to allow to be handled in a way that would inflict losses on bank creditors. This becomes increasingly true as other countries provide de jure or de facto 100 percent coverage to their banks and as banking and finance become more international in scope. Thus, it would be counterproductive to design a system that does not accommodate this reality.

To the extent that handling bank failures involves broader macroeconomic considerations, some have questioned the appropriateness of vesting this responsibility with the deposit insurer. It is suggested in this chapter that the insurance agency is appropriate for this purpose. First, the responsibility has been with the FDIC since 1934, and the system has worked reasonably well. Second, the way other countries allocate this responsibility--often to the central bank or ministry of finance--is not necessarily appropriate to the U.S. since relationships between government and banking are often much different in other countries. Third, the nature of banking makes it important to act rapidly in a failure situation. Finally, failure resolution creates an interest in maintaining certain asset values; this interest normally will not be consistent with the conduct of appropriate monetary policy.

In the current environment, it is important to ensure adequate funding for the insurance agency. The importance of this cannot be overemphasized.

First, an insolvent insurer has the same incentive to take excessive risks as does the management of an insolvent insured depository institution; this helps explain the actions of FSLIC in the early 1980s in encouraging thrifts to grow out of their problems by further leveraging nonexistent capital. Second, passing expenses and losses to the industry on a more current basis will provide incentives for the development of self-regulation and mutual risk reduction measures. Finally, Congress and the public have every right to have assurances that the need for taxpayer money to handle thrift and banking problems in the future is minimal.

To this end, several recommendations are presented. First, total assessments to the industry should be based on a modified three-year average of actual loss and expense accruals. It is suggested that caps may be appropriate for year-to-year changes in assessments and for the maximum level of assessments, but no specific recommendations are made.

Second, it is suggested that the assessment base be expanded to include secured borrowings. While there are very good arguments for also including so-called foreign deposits in the base, there is sufficient uncertainty with respect to certain of the questions that no recommendation is made at this time. Additionally, two technical suggestions are made: it is suggested that the float deduction be eliminated, and that the calculation of the assessment base be based on a daily average, rather than the current practice of using a quarterly average.

Third, it is recommended that the rebate system be based solely on the relationship of the fund to the assessment base. More specifically, rebates

would be based on a sliding scale, with a 1.0 percent fund-to-assessment-base ratio as the threshold when rebates begin.

Fourth, it is recommended that the FDIC be given direct authority to borrow from both the Department of the Treasury and the Federal Reserve System. Within limits, the FDIC would have the ability to set amounts and maturities; interest rates would be set by statute (e.g., the 90-day Treasury bill rate plus 50 basis points).

Finally, it is recommended that banks or thrifts obtaining FDIC insurance pay an entrance fee sufficient to maintain the ratio of the fund to the assessment base at a constant level. This could be accomplished through a one-time charge or a deposit that is taken into the fund over time.

FOOTNOTES

¹As discussed later in this chapter, there were several FDIC-assisted transactions consummated before Continental that raised the same issues. However, the size of Continental and the policy articulated by the FDIC at that time (see footnote 8) focused more attention on the 1984 transaction.

²The authority to own and operate a "bridge bank" now gives the FDIC another option.

³For a discussion of the development of the cost test, see Federal Deposit Insurance Corporation, Federal Deposit Insurance Corporation: The First Fifty Years. (Washington, D.C.: Federal Deposit Insurance Corporation, 1984): 86-87.

⁴Such authority was granted by Section 13(c) of the Federal Deposit Insurance Act of 1950.

⁵The 1982 amendments permit the FDIC to grant assistance in situations that do not meet the cost test if the institution is considered to be essential or if "...severe financial conditions exist which threaten the stability of a significant number of insured banks or of insured banks possessing significant financial resources...." For convenience, both findings will be referred to as "an essentiality finding."

⁶For a more complete discussion, see History, 94-97.

⁷As explained later, essentiality findings were made in other cases after 1982, but for reasons other than not being able to satisfy the cost test.

⁸The study of the federal deposit insurance system completed by the FDIC in 1983 concluded that increased depositor discipline is necessary to control risks in a deregulated environment. The vehicle used to achieve this was the "modified payoff." Under this approach, when a bank fails the FDIC would payoff deposits to the insurance limit, and make a cash advance on uninsured balances based on present value recoveries. Thus, creditors with uninsured balances would share in losses, but disruption would be reduced because of the cash advance. See Federal Deposit Insurance Corporation, Deposit Insurance in a Changing Environment, (Washington, D.C.: Federal Deposit Insurance Corporation, 1983), Chapter III.

⁹The Garn-St Germain Depository Institutions Act of 1982 placed this prohibition on stock ownership by the FDIC.

¹⁰The assistance actually was provided pursuant to a severe financial conditions findings.

¹¹For a discussion of the provisions of the original permanent insurance fund, see History, 46-53.

¹²The FDIC recently put out for comment a proposal that would have the effect of expanding the definition of a deposit to include liabilities not currently subject to assessments. See FDIC release BL-43-88, December 21, 1988. This proposal is wholly consistent with the thrust of this proposal.

¹³Two sources of foreign deposits may be identified: branches and other offices of U.S. banks located overseas and International Banking Facilities (IBFs). As of March 31, 1988, U.S. banks had a total of 743 foreign banking office which held some \$334 billion of deposits. Large banks dominate foreign deposits in both offices and dollar amounts. The five largest U.S. banks, for example, accounted for 464 banking offices (62% of the total) and for \$131 billion of foreign deposits (39% of the total).

¹⁴Implicitly, this assumes that the level of the fund is judged to be adequate when the proposed plan is implemented. If this condition is not met, it may be necessary to levy a special assessment on insured institutions to reach the desired level. It would not be necessary to bring the fund to the desired level immediately; this could be accomplished over a multi-year period.

APPENDIX: INTERNATIONAL BANKING CONSIDERATIONS

Background

Banking activities have become rapidly internationalized during the last two decades in response to technological advances and worldwide economic events. By the 1970s, major international banks were exposed to each other through interbank deposits in the Eurocurrency market and through the holding of each other's debt in the Eurobond market. Concern arose in the major industrial nations that a failure of a major bank in one country could have a substantial domino effect on the wider international banking system. In fact, since 1973, several large bank failures in the U.S. and in Europe, particularly Germany's Herstatt collapse, have contributed to major legislative changes in the way banks are supervised and regulated in nearly all major industrial nations. Another result has been a clear trend toward increased cooperation and coordination among banking regulators internationally. Actions taken by any one country in response to a domestic banking crisis are now scrutinized on a much broader level and may also have an impact on policy developments elsewhere. Therefore, as background to this study, a general review of deposit insurance schemes, banking supervision policies, and methods of handling bank failures in the major industrial nations was conducted.

Over 20 nations are currently members of the Organization for Economic Cooperation and Development (OECD). Twelve of these countries form the European Economic Community (EEC): Belgium, Denmark, France, the Federal Republic of Germany,¹ Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, and the United Kingdom. The remaining OECD members (some of which have expressed interest in joining the EEC) are: Australia, Austria, Canada, Finland, Japan, New Zealand, Norway, Sweden, Switzerland, and Turkey.

The EEC is scheduled to implement a universal banking system by 1992, as part of its overall economic objective of complete freedom of goods, services, labor and capital throughout Europe. At that time, a single banking license would authorize a bank to engage in a broad range of financial activities in any EEC member country, under the primary supervision of the home country regulator. Supervisory developments within the EEC, such as the current debate over reciprocity with nonmember countries (i.e., the U.S. and Japan), will have important international effects in the near future and will most likely lead to a further homogenization of banking supervision and regulation worldwide.

Deposit Insurance Schemes

Most OECD member countries now have some type of deposit insurance arrangement in place.² Many of these were established during the last 25 years, usually in response to a major banking crisis. Seven countries, including Denmark and Greece, have no deposit insurance, while Ireland and Portugal are currently studying the issue.³ Australia's Banking Act

specifically provides for the protection of bank depositors by giving the Reserve Bank power to take control of any bank that is likely to become insolvent and to operate it until depositors have been repaid. Similarly, in Luxembourg the need for a deposit protection scheme is not felt to be compelling due to the authorities' powers to intervene in problem cases, and because banks incorporated in the Grand Duchy conduct business which is largely of a wholesale and international nature. Only in New Zealand have the authorities explicitly excluded the introduction of any form of deposit guarantee on the ground that the Government should in no way impair incentives to ensure the maintenance of high performance standards through the provision of a safety net.

Major differences among existing deposit insurance programs include the following: whether they are operated strictly by government authorities or in conjunction with private banks; whether participation is compulsory or mandatory; methods of funding; and the amount and type of deposits covered. There also is a distinction between deposit insurance systems per se and guarantee or mutual assistance schemes. In the former, premiums are theoretically established on an actuarial basis and depositors have a legal right to be paid off in the event of liquidation. The latter systems are funded ex post and enjoy greater discretion as to the volume and form of intervention, although this distinction has become negligible since a number of deposit insurance institutions have been granted powers to assist troubled banks.

In contrast to the United States, most schemes do not protect interbank deposits; Canada and Norway are other notable exceptions to this rule. Most

countries have set ceilings limiting the amount of deposit protection granted. Typically, deposit insurance is territorial in scope, covering branches and subsidiaries of foreign banks and excluding deposits in foreign offices of domestic banks. Notable exceptions are the German and Japanese schemes which cover deposits in foreign branches of domestic banks, and the Belgian and Japanese schemes which exclude deposits in local branches of foreign banks. All deposit insurance systems cover both residents' and nonresidents' deposits, but there is a roughly even split between those that protect foreign currency deposits and those that do not. The particulars of each scheme often reflect differences in the underlying banking structure of each country.

Handling Distressed Banks

Virtually all OECD member countries now have legal provisions granting the authorities cease-and-desist powers against banks engaging in unsound business practices, and the ability to intervene in cases of threatened insolvency.⁴ In general, most countries have established procedures for regulating the exit of institutions from the banking sector which differ from ordinary bankruptcy laws. Emergency measures for failing banks typically include the provision of temporary liquidity, often through interbank credit lines, ordering changes in management, and imposing a temporary ban on sales and payments or a prohibition to carry out transactions with the general public. If the situation is viewed as irremediable or if actual insolvency occurs, authorities have the flexibility to arrange, at their discretion,

either some form of assisted merger or an orderly liquidation of the failed bank.

Specific policies relating to public intervention and the provision of emergency support (often referred to as "lifeboats"), often are left deliberately vague in an attempt to enforce market discipline. There also has been a tendency among the European countries to legally ignore problem banks in order to allow the authorities an opportunity to deal with them in private. Publicly, most central bankers maintain that each situation is unique and requires an individual solution. However, it has been widely assumed in most markets that the authorities stand ready to intervene in cases of threatened bank insolvency. This is particularly true for banks whose failure, because of their size or role in the functioning of important market segments, might have serious macroeconomic consequences from disruption to the payments system or a contagious loss of public confidence. In practice, almost all countries have demonstrated a preference to rescue or merge insolvent banks rather than liquidate them. The latter action is usually reserved for cases involving extraordinary extenuating circumstances.

The introduction of deposit insurance schemes in recent years has oftentimes been an attempt to put in place a safety net for small depositors, while fulfilling other major public-policy goals such as preserving the integrity of the financial system and promoting market efficiency.⁵ Where, in the past, authorities may have been compelled to rescue a bank in order to protect depositors and limit the economic repercussions of a bank failure, it has been argued that the introduction of a deposit protection program might contribute to the effectiveness of market mechanisms by facilitating the exit

of inefficient institutions from the banking system. Additionally, it has been thought that competitive equality could be enhanced by reducing the competitive advantages enjoyed by certain classes of banks. For instance, nationalized banks may be regarded as implicitly carrying a guarantee by the state as to full repayment to depositors, while large banks may be viewed as inherently safer than smaller ones, if the market believes that even without any formal guarantee the authorities will not allow them to go bankrupt. Thus, the "too large to fail" syndrome seems to exist independent of deposit insurance.

The remainder of this chapter is devoted to a discussion of actual bank insolvencies in some major foreign countries during the last 20 years and the manner in which each crisis was handled by the government.

Canada

The financial regulatory system in Canada was overhauled in June 1987. Concerns over the adequacy of the existing system arose in 1985 when two bank failures brought to public attention the weakened condition of the Canada Deposit Insurance Corporation (CDIC), established in 1967. The CDIC insures deposits at all of Canada's approximately 180 banks and trust and loan companies. Although no Canadian banks failed between 1923 and 1985, twelve trust companies had required CDIC action since its inception; eight of these were during 1983 and 1984. At year-end 1984, the CDIC deposit insurance fund registered a deficit of C\$871 million.

In March of 1985, the government of Canada announced a C\$255 million rescue package for Canadian Commercial Bank (CCB) of Edmonton, Alberta, the country's tenth largest commercial bank with C\$3 billion in assets. Canadian Commercial was on the brink of insolvency following a rapid deterioration in its loan portfolio, primarily energy-related loans in the U.S. and real-estate loans in recession-ridden western Canada. The support package consisted of a C\$75 million capital infusion from the CDIC and a combined C\$180 million contribution from the Alberta and federal governments and six commercial banks. In return, participants were to receive stock warrants and 50 percent of future profits until the capital infusion was repaid.

This bailout, intended to ensure the long-term viability of the bank, was justified on the grounds that the financial difficulties of CCB were unique, and that action was needed to prevent a spreading financial crisis like the one that was occurring in the Ohio savings and loan industry. Six weeks previously, however, a small financial institution whose problems were also related to sagging real-estate values in western Canada was forced into receivership. Pioneer Trust Co., a C\$320 million institution, failed when the Saskatchewan government canceled a proposed rescue package involving the guarantee of a C\$30 million equity issue. About 10 percent of Pioneer's total deposits, or about C\$24 million, were uninsured.

Unfortunately, six months after announcing the rescue of Canadian Commercial Bank, the Canadian government was forced to seek court orders to liquidate CCB and to take control of Northland Bank of Calgary, a C\$1.4 billion institution. The change in the government's position toward CCB was prompted by an examination of the bank's assets during the summer of 1985

which concluded that almost 40 percent of the bank's loans were "marginal" or "unsatisfactory," and many should not have been made in the first place. Thus, instead of restoring confidence in Canadian Commercial Bank, the bailout drew attention to its problems and to those of other regional banks, causing deposit withdrawals. By September 1, when the Bank of Canada withdrew its support from CCB and Northland, the central bank had pumped in C\$1.8 billion in short-term loans to shore up the two banks, both of which were eventually liquidated. Parliamentary authority was given to compensate uninsured depositors, costing the Canadian government approximately C\$500 million.

Following these two failures, three other Canadian banks experienced difficulty before year-end. First, attention was drawn to the C\$4.2 billion Montreal-based Mercantile Bank, in which Citicorp had a 24 percent ownership interest. Mercantile's business was predominately wholesale and the bank was having difficulty attracting deposits. Fearing another government-sponsored bailout attempt, Ottawa instead encouraged the big six banks to provide a safety net in the form of short-term while Mercantile looked for a more permanent solution, which proved to be a takeover by National Bank of Montreal. Similarly, the Canadian subsidiary of California's Security Pacific Bank took over Morgan Bank of Vancouver (C\$366 million in assets) in November of 1985. Finally, Continental Bank with C\$6.2 billion in assets suffered a serious run on deposits before several drastic confidence-building measures stabilized the bank's deposits.

The major legislative results of the Canadian banking crisis were the creation of the Office of Superintendent of Financial Institutions as an integrated regulatory body with greater supervisory powers than those of the

former agencies, and a strengthening of the CDIC's role in providing deposit insurance for the general public. Additionally, earlier this year, the federal government has signed agreements with the provinces of Quebec and Ontario, designed to facilitate the regulation of securities subsidiaries of federally regulated financial institutions. Canada's traditional financial system is being restructured according to recommendations made in the December, 1986, policy paper entitled "New Directions for the Financial Sector," more commonly referred to as the "Blue Paper."

France

In early October, 1988, the French government announced plans to bail out a small Paris bank, Al Saudi Banque, which had lost approximately 2.1 billion French francs (\$330 million), half its loan portfolio. In the past, France had refused to set up formalized procedures to manage bank collapses on the premise that banks simply did not go bankrupt in France. A nationalization program begun in 1981 brought some 33 banks under government control but this recently has been replaced by a program of gradual reprivatization.

France's deposit insurance scheme, established in 1979, is unfunded and administered privately by the Association of French Banks. Participating banks' contributions are set on the basis of ex post assessment of actual payoffs. Deposit protection in France is subject to a maximum amount of 400,000 francs per depositor, but does not extend to interbank deposits, certificates of deposit, and deposits denominated in foreign currencies. In

arranging this rescue for Al Saudi Banque, however, the Bank of France insisted that all foreign depositors be reimbursed in full, which the central bank felt was necessary in order to promote Paris as an international financial center. (French authorities are sensitive about Paris's image as an international center after last June's scandal at the stock exchange.)

The original rescue plan announced by the Bank of France called for an interest-free deposit of 2.7 billion francs from Al Saudi's major creditors (principally Thomson, the state-controlled electronics and defense group, and three French banking groups) and a similar 1.6 billion francs interest-free deposit from the entire French banking industry. However, in the face of strong opposition from leading French banks, authorities were forced to alter this plan, although they refused to completely abandon the "solidarity" contribution sought from the banking sector. In the final plan, the contribution of Al Saudi's major French creditors was increased by a third, while that of non-creditors was decreased by half. These deposits were transferred to Thomson, along with Al Saudi's liabilities. Al Saudi Banque's assets went into a new bank, managed by France's Banque Indosuez, who supplied 35 percent of the new bank's capital. Other owners of the new bank are Indosuez's Middle Eastern affiliate (30 percent), the Hariri group of Saudi Arabia (30 percent), and Thomson (5 percent).

Although the Bank of France never actually allowed Al Saudi Banque to fail, some domestic depositors lost money. It is hoped that this approach to the bank's rescue will help reassert some market discipline among depositors in small banks, although "it would be unthinkable if the Banque de France were to allow depositors in a major French bank to lose their money."⁶ Thus, the

Al Saudi incident represents an attempt by the French government to challenge 100 percent de facto insurance, although there are clearly limits on how far they will go.

Germany

The infamous 1974 collapse of Bankhaus I.D. Herstatt was, in fact, the culmination of years of concern in international banking circles over the vulnerability of interbank lending, concern which began almost as soon as the Euromarkets were created in the early 1960s. Although a number of bank failures having international implications occurred in the 1973-74 period (e.g., Franklin National Bank), the uproar over Herstatt was caused by the manner in which it was handled by the German authorities, who presumably acted to teach the highly speculative foreign-exchange market a lesson.

At the time of failure, Herstatt was one of Germany's largest privately owned banks, with assets of approximately \$900 million. By June of 1974, Herstatt had incurred losses from foreign-exchange trading that were large enough to send the bank's management to the Bundesbank for help. Efforts to reorganize Herstatt failed when the authorities realized that poor record-keeping at the bank precluded them from ascertaining the true degree of loss within a short period of time. These losses eventually amounted to nearly \$500 million. The central bank closed Herstatt on June 26, 1974 at 4 p.m. local time, while New York banks were still trading, leaving many foreign banks exposed.

Following the Herstatt collapse, Germany's commercial banks set up a fund to pay off depositors with less than \$8,000. To avoid lengthy bankruptcy proceedings, remaining creditors approved a plan on December 18, 1974, apportioning losses among three categories of creditors: German banks received 45 percent of their claims, foreign banks received 55 percent of claims, and small creditors received 65 percent of claims. In exchange, creditors waived any rights to sue Hans Gerling, majority owner of Herstatt's stock, who sold or surrendered as collateral all shares of his stock, worth about \$81.6 million at the time. Had some sort of settlement not been reached, Bonn threatened to intervene in order to ease fears that the collapse would spread to other banks.

Within a month of Herstatt's collapse, regulations were approved in Germany to effectively prevent a repetition of the excessive foreign-exchange dealings which had brought the bank down. Other changes in banking legislation quickly followed, including the prohibition of granting a new licence to a single private banker, the authorization to conduct routine audits, and compulsory deposit insurance schemes. In addition, the German government created a liquidity bank as a precautionary measure to maintain confidence in the banking system and the central bank.

International banking supervision also was strengthened as a direct result of the Herstatt collapse. In September of 1974, the Group of Ten⁷ central bank governors meeting in Basle, Switzerland, issued the following statement to deal with the immediate crisis in confidence: "While it is not practical to lay down in advance detailed rules and procedures for the provision of temporary support to banks experiencing liquidity difficulties,

the means are available for that purpose and will be used if and when necessary."⁸ The exact meaning of this statement has been subject to debate, with even central bankers disagreeing as to whether it means that big international banks won't fail, or simply that there would be help for the market as a whole if there was a cataclysm which threatened to sweep away good banks along with the bad.

The Group of Ten then formally established a framework to ensure the long-term health of the international banking system under the auspices of the Basle Committee, also known as the Cooke Committee, after its chairman. In December 1975, the committee issued the Basle Concordat which attempted to establish guidelines for supervising banks that operate in more than one country. The concordat assigns primary responsibility for supervising liquidity and solvency to the host authority, but acknowledges that parent authorities have a moral commitment to supervise the solvency of foreign branches of their banks. Like the liquidity statement issued in 1974, wording of the Basle Concordat was imprecise enough that, to this day, some uncertainties remain concerning which central bank is to act as lender of last resort to international banks and their subsidiaries.

Italy

One weakness in the Basle Concordat became apparent eight years after Herstatt's collapse when Italy's Banco Ambrosiano scandal erupted. In June of 1982, the Bank of Italy appointed a special board to run the Milan bank after its chairman, Roberto Calvi, disappeared and then was found hanged under a

bridge in London. Mr. Calvi's flight from Italy was believed to have been triggered by the central bank's request for an explanation of a \$1.3 billion irregularity on the books of Banco Ambrosiano's foreign subsidiaries. In addition to a large domestic empire of banks, insurance companies, and a publishing group, Banco Ambrosiano, through its Luxembourg subsidiary, operated 12 foreign banking and service corporations in Switzerland, the Bahamas, the U.S., Brazil, Peru, Argentina, Hong Kong and Nicaragua. Italian authorities were trying to ascertain the use to which the \$1.3 billion in unsecured loans to 15 Panamanian shell companies had been put.

In dealing with this crisis, the Bank of Italy determined that its responsibility did not extend to bailing out Banco Ambrosiano Holdings, the Luxembourg subsidiary 70 percent-owned by the Milan bank, which was, in turn, parent to the Central and South American operations at the heart of the controversy. Complicating matters further was the existence of "comfort letters" issued by Istituto per le Opere di Religione (IOR), the Vatican bank, endorsing the loans to the front companies, many of which appeared to be direct subsidiaries of the IOR. Approximately half of the amount in question had been borrowed on the Euromarkets directly by Banco Ambrosiano; these liabilities were covered by a seven-bank safety net formed at the instigation of the central bank. By late July, however, Banco Ambrosiano Holdings, the Luxembourg affiliate, had defaulted on some \$400 million in borrowings.

The link between the parent bank and its international subsidiaries was further severed later that summer when the Italian authorities placed Milan's Banco Ambrosiano in liquidation, having determined the impracticality of all other alternatives. A new bank, called Nuovo Banco Ambrosiano, was set up and

capitalized at the equivalent of \$432 million by the seven Italian banks forming the initial rescue group. The new bank's assets excluded "foreign subsidiaries and other activities regarding relationships between those foreign subsidiaries." The Bank of Italy continued to maintain its distance from the non-Italian liabilities, pending some statement from the Vatican bank clarifying its own role in the affair.

The Italian authorities' refusal to aid the Luxembourg subsidiary angered European bankers who had lost money to B.A. Holdings, many of whom accused the Bank of Italy of reneging on the Basle Concordat. Other bankers disagreed, however, asserting that the concordat applied only to the supervisory duties of central banks, not to their roles as lenders of last resort. Furthermore, the concordat was vague on the subject of foreign subsidiary holding companies, which unlike branches are legally separate entities from their parents. Banco Ambrosiano Holding's status was even more ambiguous because it was not even a wholly owned subsidiary. Hence, neither the Luxembourg nor the Italian banking authorities were legally empowered to supervise it.

Settlement with Ambrosiano creditors was finally reached nearly two years after Roberto Calvi's disappearance. The Vatican bank, although cleared of any wrongdoing in the matter, agreed to pay approximately half of the \$500 million settlement out of a sense of "moral obligation." The remaining funds were raised through the sale of the Ambrosiano group's assets. Most of the settlement (\$406 million) went to the 120 foreign bank creditors of B.A. Holdings, while Italian creditors of the parent bank received \$100 million. Altogether, creditors received about 67 percent of their claims.

Investigators were unable to trace the precise ownership and holdings of the Panamanian companies, but evidence indicated that a substantial portion of the questionable loans, most of which predated 1978, was used to buy stock in the Milan-based bank. These loans, denominated in dollars, became troubled in part through the relative weakness of the lira and mushroomed as unpaid interest was added to the original principal. Mr. Calvi, himself, appeared to have had control over at least some of the shell companies, and he may have used his Vatican contacts to buy time from some of the banks which were demanding payment. Whether Mr. Calvi was attempting to gain complete control over the bank or simply indulging in attempts to manipulate the price of the stock remains a mystery.

In hindsight, it may be seen that much of the motivation underlying the Italian government's handling of the Ambrosiano affair had less to do with clarifying the division of international banking supervisory responsibilities among the Group of Ten than with clarifying the legal relationship between church and state within Italy itself. In addition to the Vatican bank's involvement in the crisis by way of the "letters of comfort," the IOR had other longstanding ties with Banco Ambrosiano which caused the Milan bank to be dubbed "the priests' bank." In 1971, Archbishop Marcinkus, president of the Vatican bank, joined the board of Banco Ambrosiano's partly owned affiliate in the Bahamas, and the IOR became the owner of a 1.6 percent stake in the parent bank, as well as small stakes in the Bahamas and Luxembourg affiliates. Bank of Italy inspectors issued a confidential report in 1978 expressing grave reservations over several transactions in which Mr. Calvi had involved the Vatican bank and its traditional shroud of secrecy. Indeed, for regulatory purposes, the Vatican bank is treated like a foreign bank, outside

the Bank of Italy's jurisdiction. Almost at the same time that liquidators reached an accord concerning settlement with the creditors of Banco Ambrosiano, a new concordat governing relations between the Italian state and the Vatican was signed in Rome.

The Banco Ambrosiano affair led to the creation in 1987 of Italy's FDIC-style Deposit Guarantee Fund, capitalized at 1,000 billion lire by pro rata contributions from the nation's 1,100 banks. The ability of this fund to withstand financial crisis is already being tested in the case of Cassa di Risparmi di Prato, a Tuscan savings bank taken over by the Bank of Italy in September 1988. Cassa di Prato has incurred 1,400 billion lire in bad debts, over half of which are considered unrecoverable. After its condition became known, a run on deposits reduced the bank's deposit base from 2,200 billion lire to 1,650 billion lire.

Previous supervisory actions, including three recent "inspections," a mandated management change in 1987, and capital injections, first by other local savings banks, then by the Guarantee Fund itself, have failed to save the bank. In mid-November, Italian authorities announced plans to launch a 1,100 billion lire lifeboat for Cassa di Prato which was immediately met with controversy. The original rescue plan favored by the central bank and the Deposit Guarantee Fund called for contributions of 650 billion lire from the Guarantee Fund, 350 billion lire from other Tuscan savings banks, and the remaining 100 billion lire from a group of six national banks. However, several banks balked at being called upon to provide additional capital beyond their original contributions, and objected to the fact that the Guarantee Fund would end up owning control of Prato. Amid reports of suspected fraud and

embezzlement at the savings bank and allegations that the central bank was negligent in its supervision, the Deposit Guarantee Fund has assumed the entire rescue burden. With its capital already depleted by September's 200 billion lire capital injection to Prato, the Guarantee Fund promised to provide 800 billion lire now, and possibly 300 billion lire more early next year when it is recapitalized by Italy's banks.

The failure of some banks to agree with the government's plan is similar to France's experience one month previously in the case of Al Saudi Banque, which was eventually saved by a group of commercial and bank creditors. However, France's deposit insurance fund operates differently than Italy's. The Prato affair is viewed as a test case for the new fund, the Bank of Italy's authority, and the Italian banking system in general. The Bank of Italy would prefer the takeover of smaller regional banks by cash-rich banks because it would aid in restructuring the industry by introducing more competition into regions of Italy traditionally dominated by local savings or agricultural banks. The outcome of this crisis will have an important effect on the treatment of future bank failures in Italy.

Norway

Norway's banks are currently in turmoil as a result of the record losses incurred during 1987 and predictions for even worse results this year. The major causes of this poor performance are overrapid expansion, lax risk assessment, and securities losses following the stock market crash last year. Norway's government, itself, has been imposing austerity measures throughout

the economy, which was hard hit by the drop in oil prices during 1986. This is causing record business bankruptcies and helping generate loan losses for the banks, most of which are undergoing radical restructuring.

In September 1988, it was announced that the central bank and the Guarantee Fund of the Commercial Banks had intervened as lenders of last resort in the case of Sunnmoersbanken, a medium-sized bank. This action was met with relief in the international credit markets, which had been ill-at-ease with the Norwegian government following last year's refusal to honor the financial obligations of Kongsberg Vaapenfabrikk, the state-owned arms maker. September's action by the central bank was the first test of a statement of support for the liquidity of its banks made in the aftermath of the losses incurred in 1987. Markets were skeptical because this statement seemed to deviate from that made by the previous governor of the central bank who said the policy was to support the "solidity" of its banks, implying unconditional guarantees of support.

The central bank maintains that it is difficult to determine if the policy has actually shifted, as the former one was never tested. The actual strength of its current commitment is likely to be tested again, however, given the precarious position of many Norwegian banks. Plans to cut high operating costs, including staff reductions and increases in customer service fees, coupled with newly restricted lending policies, could move the economy into stagnation. At the same time, banks need to raise fresh capital in a sagging stock market in order to comply with the more stringent capital requirements recommended by the Cooke Committee. In June, the Norwegian Bankers Association joined the EEC bank federation as an associate member,

which implies a limited status but allows access to EEC plans. To comply with these standards, Norway's banks, insurance companies and financial institutions will have to raise some \$2.4 billion in new equity by 1992, a difficult task given the restrictive regulations on the size of foreign investor holdings permitted in Norwegian companies.

Norway's policy for handling distressed banks allows the provision of temporary liquidity or other financial assistance from the Bank of Norway or the Guarantee Fund, placement under public administration for up to one year, or eventual liquidation if no merger partner can be found.

United Kingdom

Prior to 1979, the Bank of England had no formal licensing powers; it simply supervised those institutions which were recognized as banks on a voluntary basis. Recognition as a bank was achieved over time in the marketplace by a deposit-taking company that developed the sort of business associated with banks in a manner that enhanced its reputation and standing in the market. When a company was treated as a bank by other banks, including the Bank of England, then the institution had achieved recognition as a bank. Recognition measures included unsecured lending by the Bank of England or the ability to borrow in the market at the best rates available.

Over the years, it became necessary to superimpose a statutory "ladder of recognition" on the quest for market recognition, but basically this informal method of licensing banks worked well for many years. It took

considerable time for institutions to reach banking status and their business was generally confined in the earlier years to those who knew them and were capable of judging the risks in dealing with them. However, in the late 1960s and early 1970s, a large number of new institutions grew very quickly and developed business relationships with other banks and the general public before achieving full recognition by the Bank of England. These unregulated banks were primarily engaged in high-rate consumer lending and lending for property development, two areas where money was in great demand. Before 1971, recognized banks had individual ceilings on the amount they could lend to the private sector which were set by the Bank of England. These credit constraints, coupled with the economic climate of the time, helped fuel the growth of the new institutions which became known as secondary banks.

A little-publicized crisis developed among these banks, which began in November 1973 with a liquidity crisis at London & County Securities, an institution that had developed a significant deposit base from the general public by opening branches in large department stores. The company did not have a good reputation in financial circles and confidence broke down completely when a respected banker, who had been recruited to strengthen the operation, resigned after a few months. Emergency assistance was arranged by its clearing bankers in consultation with the Bank of England, but money market lenders rapidly became reluctant to renew their lendings to a range of institutions thought to be in similar positions, which, if continued, would almost certainly cause a number of them to fail.

Over the next several months a committee, composed of representatives of the primary clearing banks and nicknamed "the lifeboat," recycled back to

those secondary banks which were deemed healthy the funds necessary for them to meet maturing deposit obligations. The amounts required to support a given bank were apportioned among the clearing banks pro rata to their total deposits, with the Bank of England taking a fixed 10 percent. Ironically, there were no runs by public depositors, but rather a loss of confidence in the wholesale money markets which developed so rapidly that the authorities feared it would spread to the banking system proper. By 1974, when property values fell again due to the failure of several well-known development companies, it became clear that some of the secondary banks being supported were no longer viable. By this time, the Support Group was the main creditor at these banks, although some outside deposits from the general public remained. It was felt that it would be bad policy if a liquidation caused depositors to lose money, particularly since they had probably relied on the involvement of the Bank of England and the clearing banks in leaving their funds on deposit. Therefore, the Bank of England offered to acquire for face value all such remaining deposits, except those made by the people operating the institution or their close relatives.

By March of 1974, some 21 institutions had been granted support amounting to around 400 million pounds, and eight had been liquidated. Confidence continued to wane however, and threatened even some established banks. Five additional, rather large, passengers climbed aboard the lifeboat and toward the end of the year the 1200 million-pound limit of shared risk support agreed on by the clearing banks was reached. Again, the Bank of England was obliged to shoulder the additional burden which was, fortunately, modest and short-lived.

Later that year, while much of the banking world's attention was focused on bank failures in the U.S. and Germany, two of Great Britain's fully fledged banks with significant international obligations began to experience problems. These were Slater Walker Ltd. and Edward Bates & Sons Ltd., both of which quietly received substantial aid from the Bank of England. Slater Walker eventually became a subsidiary of the central bank, while Bates was taken over by a major UK bank and a group of Arab investors who provided several capital injections over the years. All together, approximately two billion pounds was involved in the support operations following the liquidity crisis begun at London & County Securities in 1973. Eventually most support monies were repaid, although the process was long and drawn out, and at least some losses were sustained by the Bank of England.

Ten years later, in 1984, the Bank of England again arranged a lifeboat to save Johnson Matthey Bankers from collapsing under the strain of 250 million pounds in loan losses. The central bank set up a 150 million-pound emergency fund with half the money from its own resources and half from a group of UK clearing banks and members of the London gold market. In this case, the losses turned out to be smaller than expected and only 42 million pounds was used. It was announced in November of 1988 that the Bank of England had won a settlement of 25 million pounds from Arthur Young & Co., the accountants to Johnson Matthey from 1981 to 1984. This crisis led to the Banking Act of 1987 which substantially strengthened the supervisory functions of the Bank of England.

FOOTNOTES

¹Hereafter, the Federal Republic will be referred to simply as "Germany." Banking literature, which almost never references the Communistic German Democratic Republic, conventionally drops the political modifier "West" usually used in the American press.

²Other countries with deposit insurance schemes in place, which are not members of the OECD, include Argentina, Chile, India, and Nigeria.

³Domestic deposit insurance schemes in these EEC countries may be precluded by the adoption of a European-wide scheme, one of the nonbinding recommendations of the EEC's commission on banking.

⁴R. M. Pecchioli, Prudential Supervision in Banking, Trends in Banking Structure & Regulation in OECD Countries Series (Paris: PECD, 1987), 132-133.

⁵Ibid., 133-34.

⁶Financial Times (London), October 6, 1988.

⁷The Group of Ten include central bank governors from the U.S., Canada, Japan, the U.K., France, Germany, Italy, Belgium, the Netherlands, and Sweden. Switzerland is an honorary eleventh member.

⁸Charles Grant, "Can the Cooke Committee Stand the Heat?," Euromoney, October 1982, 39.

Chapter 9

OPTIONS FOR SOLVING THE FSLIC PROBLEM

The Federal Savings and Loan Insurance Corporation (FSLIC) is currently under considerable financial pressure resulting from the deteriorating condition of some of its insured thrift institutions. By most estimates, the cost of resolving failures at these institutions will significantly exceed the FSLIC's resources. This situation has led to proposals to merge the FDIC and the FSLIC in order to solve the FSLIC's financial problems. Others have suggested more sweeping regulatory restructuring which would eliminate--so the argument goes--outmoded distinctions between commercial banks and thrifts.

The magnitude of the losses facing the FSLIC--and some large Southwest banks--underscores the need to correct flaws in the existing system of insurance, regulation and supervision. In addition, the delay in obtaining needed funds to resolve the FSLIC's financial shortfall emphasizes the necessity of adequate funding. Absent independent regulatory discretion and funding, costly delays in the resolution of insolvencies are inevitable.

Several basic ingredients--the authority and resources to enforce capital requirements against undercapitalized and insolvent institutions, independence from the regulated industry, and independence from the political

process--are necessary for cost-effective federal deposit insurance and its prerequisite, strong safety-and-soundness regulation. Any plan for addressing current S&L problems which also aims to prevent their recurrence must address these issues. In addition, the issue of how to pay for the FSLIC's financial shortfall must be addressed.

The origin and scope of the FSLIC problem, the FSLIC case resolutions in 1988, and the costs of postponing further case resolutions are discussed in the next section. Financial and regulatory options are examined separately and, for the most part, independently, in subsequent sections. As will be discussed, the exact form of any restructuring of the insurance funds or the regulatory system is less important than ensuring that the essential ingredients of a viable deposit insurance system are present. The overall conclusions are presented in the last section.

The FSLIC Problem

Origin and Scope

The current problems facing the S&L industry can be traced, at least in part, to the extraordinarily high interest rates of the early 1980s. The nature of the S&L business makes the industry's earnings very sensitive to changes in interest rates, and this was especially true before the widespread use of adjustable-rate mortgages. S&Ls' balance sheets traditionally consisted primarily of long-term, fixed-rate mortgages funded by savings and

time deposits. Interest rates paid on these deposits were constrained by Regulation Q. Whenever market interest rates rose above regulated rates, S&Ls faced deposit outflows.

In part to help S&Ls cope during these periods of disintermediation, which became especially troublesome during the inflationary environment of the 1970s and early 1980s, the regulators and Congress took steps to deregulate deposit interest rates. In 1978, S&Ls were authorized to offer a six-month money-market certificate-of-deposit which paid a market-related interest rate, and within a year this instrument accounted for 20 percent of S&Ls' deposits.¹ The Depository Institutions Deregulation and Monetary Control Act of 1980 established a committee to phase out all deposit interest-rate ceilings by March 1986, and allowed S&Ls (and banks) nationwide to offer interest-paying consumer transactions accounts, i.e., Negotiable Order of Withdrawal (NOW) accounts. In a further attempt to help them "keep up" with rising interest rates, in 1981 the FHLBB authorized federally chartered S&Ls to offer adjustable-rate mortgages.

These developments reduced disintermediation but did not mitigate the overall impact of rising interest rates on the S&L industry. S&Ls' average cost of funds rose from about seven percent in 1978 to over 11 percent in 1982, and exceeded the average return on mortgages during 1981 and 1982.² This led to large operating losses, illiquidity and extensive insolvencies throughout the industry. It has been estimated that by 1982 virtually the entire S&L industry would have been insolvent by about \$100 billion if marked-to-market.³ As a result of these developments, 470 S&Ls failed from 1980 through 1983, as compared with 226 failures from 1934 through 1979.

The regulatory response to these problems was based in large part on a lack of adequate resources to deal with the situation and a belief that conditions would improve when interest rates declined to normal levels. This response included shoring up industry earnings and net worth with a variety of accounting changes which, while not improving the real economic position of the industry, avoided (at least technically) insolvencies and bought time for interest rates to decline.⁴

In addition to a more lenient definition of capital, less "regulatory" capital was required of S&Ls. Minimum regulatory capital requirements were reduced from five percent of liabilities to four percent in 1980, and to three percent in 1982. S&Ls were permitted, and apparently encouraged in some instances, to expand rapidly, and many did just that. For example, S&L assets in Texas grew from \$38 billion to \$85 billion between year-end 1982 and year-end 1985. Moreover, many institutions took advantage of liberal new asset powers (particularly in Texas and California) to expand into nontraditional, higher-risk lines of business in which they had little or no experience. Capital requirements which were inadequate to cushion traditional S&L risks were certainly inadequate to cushion these new higher risks. In hindsight, most observers, including the current FHLBB, call these regulatory policies mistaken. In the absence of resources to close insolvent S&Ls, controls on their growth and asset investment authority should have been imposed immediately--not several years later.⁵

The combination of undercapitalized growth into high-risk activities, an extremely severe regional economic depression in the Southwest, real-estate problems in California, and instances of insider abuse and fraud at some

institutions has drastically increased the number and asset holdings of troubled S&Ls in recent years. The number and size of S&Ls which were both insolvent (on a tangible net worth basis) and unprofitable rose from 387 with \$119 billion in assets in 1985 to 509 with \$215 billion in assets at year-end 1987, before the current wave of S&L closings began.

Of the S&Ls open as of year-end 1988, 358 with \$136 billion in assets were both insolvent on a tangible net worth basis and unprofitable. One hundred two S&Ls with \$81 billion in assets were insolvent but profitable as of year-end 1988. It is probable that many in this group will ultimately require assistance. Finally, there is a large group of marginally solvent (tangible capital ratios between zero and three percent) but unprofitable S&Ls, consisting of 154 S&Ls with assets of \$101 billion. Since reported capital on the financial statements of undercapitalized and unprofitable depository institutions is likely to err on the optimistic side, it is probable that many S&Ls in this group are already insolvent; many others could easily slide into insolvency.

The cost of closing the insolvent institutions can only be estimated with any confidence after detailed onsite examinations of S&Ls requiring assistance. Even then, uncertainties would remain based on regional and local economic developments, interest-rate trends and factors that may influence the future value of S&L franchises.

Estimates of the present-value cost of closing or merging insolvent S&Ls currently range to well over \$100 billion. These figures do not account

for any possible recession or increase in interest rates, which would substantially increase the total cost.

FSLIC Case Resolutions in 1988

During 1988, FSLIC resolved through deposit payoffs or insured-deposit transfers 27 insolvent S&Ls with \$5.4 billion in assets, at an estimated cost of \$3.9 billion, or 71 percent of assets. During the same period, 189 insolvent S&Ls with assets of \$104.7 billion were dealt with through assisted merger or consolidation with other institutions, at an estimated cost of \$35.5 billion, or 34 percent of assets.

Mostly as a result of these transactions, the number of S&Ls insolvent on a tangible net worth basis, but open for business, declined from 647 with \$346 billion in assets at year-end 1987 to 450 with \$224 billion in assets at year-end 1988. The tangible net worth deficit of insolvent S&Ls open for business declined from \$27.7 billion at year-end 1987 to \$15 billion at year-end 1988.

It is evident from these figures that there is still a substantial segment of the S&L industry that will require assistance. Moreover, additional costs to the deposit insurance system may emerge from the transactions that already have been consummated. The first area of concern relates to the thin capitalization of some of the resulting institutions, since it appears that several newly created institutions are insolvent or marginally solvent on an estimated tangible net worth basis. This measure of

net worth excludes goodwill, which is allowable as capital under S&L but not bank regulations. Thus, under a conservative valuation approach these institutions could be the source of further costs to their insurer.⁶

Another broad area of concern is whether acquirers are being given the proper incentives to minimize costs to the FSLIC fund. It is unrealistic to expect investors to risk substantial amounts of their own capital in a hopelessly insolvent institution without a reasonable expectation that they will be starting with a "clean slate." In other words, the bad assets and losses in an acquired institution are the responsibility of the insurer. These assets will almost always be worth more if kept in an ongoing institution than they would be in liquidation. Therefore, when a relatively large depository institution fails, the aim of a purchase-and-assumption transaction is often to keep the bad assets in the acquiring institution while balancing two conflicting objectives--guaranteeing the reimbursement of loss on the bad assets while providing incentives for the acquirer to maximize asset collections. The more the acquirer collects on the assets, the less the insurer will have to pay to make good its guarantee against capital loss to the acquirer. This is not an easy balancing act and there is no universal agreement on how to structure such transactions.

It appears that some of FSLIC's larger transactions have been structured in such a way that the acquiring S&L lacks sufficient incentive to maximize collections on bad assets, or to take the steps needed to protect asset values. For example, in one Southwest Plan transaction, the acquiring S&L is guaranteed principal and a specified yield for ten years on all "covered" assets.⁷ The guaranteed yield is the Texas cost of funds plus a

spread equal to 275 basis points in the first year after the effective date of the agreement, and declining to 200 basis points during the tenth year of the agreement, regardless of the maturity of the asset. In most Southwest Plan transactions, "covered" assets are reportedly about 50 percent of total assets.

There appears to be no incentive and perhaps even a disincentive for the acquiring S&L in this example to "work" the covered assets. Simply holding them on the books and collecting a risk-free spread in excess of 200 basis points of book value is likely to be far more attractive than expending resources on improving the quality of the assets. Under the capital-loss coverage and yield-maintenance scheme described above, the quality of the covered assets makes no difference to the institution unless and until the asset can be improved to the point where it is worth more than the sum of the value of a risk-free instrument yielding a net income stream in excess of 200 basis points, plus the costs associated with improving the asset to that point. It seems highly unlikely that low-quality assets would ever pass such a cost test.

The risk to the FSLIC insurance fund of such arrangements is that losses on covered assets may be much higher than they would have been had the acquirer been given the appropriate incentives to collect on and maintain the assets. In some cases it appears that such incentives have been built into agreements negotiated by the FSLIC. To the extent that incentives are absent, costs to the insurance fund probably will be larger than necessary.

It is easy to criticize transactions done subject to pressures both of time and available resources. The FSLIC has been under tremendous pressure to resolve insolvencies quickly; indeed, this chapter argues strongly in favor of quick resolutions of insolvencies. Nevertheless, if transactions cannot be negotiated without granting long-term forbearances from capital or other regulatory requirements, or if large, locked-in spreads are demanded on large pools of acquired assets, the alternative of closing and paying off institutions must be seriously considered, despite higher short-run costs.

Costs of Delaying Resolution

Delay in closing or merging financially troubled S&Ls will increase the federal government's present-value cost of resolving the FSLIC problem, impose substantial costs on healthy banks and thrifts, and interfere with the proper functioning of the S&L regulatory system. These costs will be incurred for the following reasons: the franchise values of a substantial fraction of the S&Ls that ultimately will require assistance will continue to deteriorate; troubled institutions bid up the cost of funds and drive down loan rates for healthy banks and thrifts; and the continued operation of a large number of insolvent institutions makes it difficult to enforce capital standards and ties up regulatory resources which otherwise could be focused on the marginal and healthy segments of the S&L industry.

Any action taken on the FSLIC shortfall, including delay in resolving it, is an implicit decision on how to finance that shortfall. When an insolvent S&L is allowed to remain open, the S&L funds the shortfall through

deposits and other borrowings, but the liability becomes the FSLIC's (unless the institution returns to solvency) when the institution is ultimately closed or merged. The cost of funding the institution during the period it remains open is the institution's reported net operating loss plus any further net deterioration in the market value of its franchise while it remains open. When an insolvent S&L is closed or merged--assuming the net worth deficit is "filled" so that resolution is not simply being postponed--the cost of financing is the cost of funds to whatever governmental or quasi-governmental agency (currently the Financing Corporation--FICO⁸) is presiding.

Which of these options is cheaper? Clearly, the U.S. government's cost of funds is below that of insolvent S&Ls. The only way it could be cost-effective to allow an insolvent S&L to remain open is if it is retaining enough net operating income and/or appreciation in franchise value to offset this cost-of-funds differential. For the past several years exactly the opposite has been true.

Insolvent S&Ls open as of year-end 1988 recorded \$850 million in net operating losses during the first six months of the year; that figure does not include loan losses or loan-loss provisions. It also does not reflect the substantial deterioration in franchise values during this time. This pattern is unlikely to be reversed, at least by enough to provide any financial justification for not closing these institutions as fast as possible. Moreover, the growth in resolution costs resulting from these operating losses are not confined to just a few institutions: of the 340 insolvent and unprofitable S&Ls with \$131 billion in assets open for business as of year-end 1988, 296 with \$88 billion in assets had negative operating income. The 100

"worst" of these S&Ls, however, accounted for almost 90 percent of the operating losses of all insolvent S&Ls. By not closing these S&Ls, the FSLIC (and perhaps the federal government) is implicitly underwriting their operating expenses.

There are other factors that will increase the cost of closing or merging insolvent S&Ls the longer they remain open for business, including the incentives facing managers of such S&Ls and the deterioration of franchise value of these institutions. When institutions are at or approaching insolvency their owners and management may look for very risky investments in an attempt to return to solvency. If such policies are not restrained by supervision, they may result in high growth, increased interest-rate risk, and aggressive lending and direct investments. In addition, efforts to improve reported earnings and capital can encourage the taking of gains and avoidance of losses in ways that may reduce the institutions' franchise values. For example, attempts to minimize current losses are apt to lead to minimal maintenance of the institutions' own facilities as well as managed or foreclosed property, failure to pursue appropriate legal or other protective actions to preserve or strengthen creditor positions, and sale of valuable assets at inopportune times. Such "economizing" will frequently be self-defeating from the standpoint of long-run value.

While clearly desirable, the imposition of restrictions on insolvent S&Ls' growth and asset acquisitions (including institutions in the management consignment program) may itself contribute to loss of franchise value. The best personnel may leave; buildings and systems may not be maintained; the best customers may go elsewhere; and the capacity to generate business may be

lost. As a result, the ultimate costs of disposing of the insolvent S&Ls are likely to increase.

It is sometimes argued that the cheapest way of dealing with the FSLIC problem would be to dole out money to close some insolvent institutions while waiting for a turnaround in the Southwest economy. This view is incorrect for a number of reasons. First, a substantial part of the current S&L problem is outside the Southwest and would not benefit from a regional turnaround. As measured by assets, about 60 percent of the S&Ls that were both insolvent and unprofitable in 1987 were located outside the Southwest (defined as Texas, Louisiana, Oklahoma, Arkansas and New Mexico); as measured by capital deficit, about 46 percent of the insolvencies were outside the Southwest at year-end 1987.

Second, some suggest that the Southwest economy, and particularly the Texas real-estate market, could "turn around" sufficiently so that the franchise values of insolvent S&Ls would increase enough to make delay in closing or merging the institutions worthwhile. This argument is dubious. Due to the recent outmigration of people from Texas, Oklahoma and Louisiana, and the uncertain prospects for a substantial increase in the world price of oil, there is little reason to expect a large reduction in commercial real-estate overcapacity in these states in the near term. Meanwhile, waiting for a turnaround is speculative and very expensive.

Another argument against acting quickly to close or merge insolvent S&Ls is that huge amounts of foreclosed real estate would be dumped on the market at "firesale prices," thus reducing the federal insurer's liquidation

recoveries and exacerbating the current real-estate depression in these areas. This argument is incorrect. First, the argument assumes that closing or merging a troubled institution necessarily involves "dumping" the poor-quality assets of that institution immediately. On the contrary, such assets can be and sometimes are held by the liquidator for long periods of time. In the meantime, the insolvent institution is closed and is no longer generating operating losses at federal expense. Second, it is doubtful that selling foreclosed real estate depresses the general level of real-estate prices. By its very existence, it is the large amount of unoccupied and underutilized real estate that depresses real-estate prices. Thus, holding idle real estate off the market serves no useful purpose in terms of propping up real-estate prices.

Delay in disposing of insolvent S&Ls also imposes major costs on healthy depository institutions. In order to finance their net worth deficits and pay operating expenses, many insolvent S&Ls are forced to bid aggressively for deposits and aggressively price loans, thereby raising the cost of funds and reducing loan rates for healthy banks and thrifts. This puts a heavy burden on institutions attempting to earn a market return on an adequate level of capital. These adequately capitalized institutions have something to lose--namely their own capital--from any narrowing of spreads. To force them to compete with insolvent institutions that aggressively price loans and deposits at their insurer's expense is inequitable.

Additional costs are imposed on the S&L supervisory system by not closing insolvent S&Ls. First, supervisory resources are being diverted to some extent to the worst segment of the S&L industry. As mentioned earlier,

there are many marginally solvent S&Ls with tangible capital between zero and three percent; there are many more S&Ls with tangible capital above three percent but below bank standards. Safety-and-soundness considerations and the insurer's interests would dictate that they get more supervisory attention--in particular, credit-quality examinations--than they probably are now getting. Second, it is more difficult to enforce capital standards and other regulatory requirements when a large number of insolvent institutions are allowed to remain open. Such a situation encourages the belief that even the most flagrant violations of standards will be tolerated.

Finally, delay in disposing of insolvent S&Ls increases the risk that interest rates will rise at some point, substantially increasing the ultimate cost of the FSLIC resolution. Despite the use of variable-rate mortgages and hedging by S&Ls, the earnings and net worth of the industry remain very exposed to increases in interest rates.⁹ As long as interest-rate exposure is confined to reasonably healthy institutions, capital stands between the insurance fund and adverse interest-rate movements. Interest-rate exposure at insolvent S&Ls, however, exposes the insurance fund to loss. Moreover, because of the option borrowers have to prepay their mortgages, reductions in interest rates probably help "exposed" S&Ls less than increases in interest rates hurt them. The potential for loss to the insurer in the event of rising interest rates is therefore probably greater than the potential for savings from reductions in interest rates. This means that, from the standpoint of interest-rate risk, delay in disposing of insolvent S&Ls is more likely to increase resolution costs.

Financial Solutions to the FSLIC Shortfall

The FSLIC insolvency is substantial--with current estimates ranging to well over \$100 billion. Additional funds would be needed to recapitalize the FSLIC or to provide another insurer a sufficient initial reserve against losses from the remaining, currently FSLIC-insured institutions. The alternative sources of funds available for eliminating or reducing this shortfall are very few indeed: FSLIC-insured thrift institutions; the FHLBs; the FDIC; the banking industry; and finally, public financing by the U.S. Treasury, i.e., the American taxpayers. The ramifications for the federal budget of each funding alternative are examined because of the political importance attached to this consideration.

S&L Industry Financing

Three alternative means of funding the FSLIC shortfall could be provided by the S&L industry; however, none appears able to cover the immediate shortfall of at least \$60 billion. First, mortgage the FSLIC's and, in effect, the S&L industry's future earnings streams, and perhaps raise the insurance assessment rate.¹⁰ Second, obtain a capital contribution from the S&Ls, either as a one-time contribution or a continuous noninterest-bearing contribution. Third, capture the net worth and retained earnings, or mortgage the future earnings, of the FHLBs, which are largely owned by the S&L industry.

The first alternative, mortgaging the FSLIC's future income stream from its current regular insurance assessment on insured thrifts, could not possibly eliminate the current FSLIC shortfall. It could raise substantial funds for that purpose, but possibly impair the FSLIC's future operations. As much as \$8 billion to \$24 billion might be raised by borrowing against the FSLIC's projected income from its current regular assessment over the next ten to 30 years.¹¹ Several billion dollars more might be raised if that income were mortgaged further into the future.

Mortgaging the FSLIC's expected regular assessment income over 30 or more years seems unrealistic. Unless funded or guaranteed by the federal government or fully collateralized, the interest charge would be substantial given the current financial outlook for the FSLIC and many of its insured thrifts. This outlook casts considerable doubt on any long-term FSLIC income projections.

Mortgaging the FSLIC's projected income in this manner also could have considerable negative ramifications. It could permanently leave the FSLIC in its present predicament--without the necessary financial resources for its operations. The agency's financing possibilities would be those currently available, except that borrowing against future income might be hampered by any remaining indebtedness from any present borrowing. The vulnerability of the FSLIC to recurring financial problems also could give rise to other problems. For example, thrift conversions to FDIC insurance would be encouraged. Presumably, S&Ls would realize that the FSLIC's problems could recur and that the FSLIC would be much more likely to impose a substantial one-time assessment or increase the insurance assessment rate when the

industry's financial condition improved substantially. This realization could encourage thrifts to convert to other types of federal deposit insurance as quickly as possible in order to avoid this expense.

Similarly, it is uncertain to what extent increasing the regular assessment rate for FSLIC insurance or maintaining the present special assessment for a lengthy period would generate additional income for the FSLIC without unduly threatening the industry's viability, discouraging capital investment therein, or impairing the insurance agency's future operation. Success in this regard would hinge upon several major factors. First, any increase should be affordable for FSLIC-insured institutions. Second, all federally insured depository institutions should be assessed on the same base and at the same or similar rate, and the overall costs of the different types of federal insurance in relation to their benefits should be the same or proximate. Third, the benefits of federal deposit insurance should continue to outweigh the costs.

At present, FSLIC-insured institutions generally cannot afford the substantial special assessment or any assessment increase. They already are paying the one-twelfth of one percent regular assessment, which is also imposed on federally insured banks and credit unions, and a one-eighth of one percent special assessment, which is projected by the FHLBB to continue through 1998. Together these assessments cost about 20.8 basis points per dollar of deposits while the industry's average annualized return on assets for the first quarter of 1988 was -1.2 percent. The assessments amounted to about 67 percent of the average annualized return of 0.3 percent for only the GAAP-solvent S&Ls. The S&L industry also does not have the necessary capital

to absorb such large assessments. The industry's tangible net worth totalled only about \$6.4 billion, or about 0.6 percent of its assets; the tangible net worth of the solvent S&Ls amounted to about \$40 billion, or about four percent of their assets.

Furthermore, nearly one-quarter of S&L assessments does not benefit the FSLIC at all. Assessments paid by insolvent and unprofitable S&Ls increase the FSLIC's financial shortfall by at least a corresponding amount. In addition, continuation of the FSLIC's special assessment or an increase in the regular assessment rate could cause additional risk-taking by some institutions and encourage assessment-avoidance tactics and insurance conversions--to the detriment of the FSLIC.

In addition, a long-term FSLIC-insurance assessment rate substantially greater than that of the other federal deposit insurance agencies may not significantly benefit the FSLIC.¹² Absent the conversion moratorium, healthy institutions would probably convert to a less-expensive insurance program or exit the industry by selling out to FDIC-insured banks, despite the advantages of the S&L charter. Otherwise, FSLIC-insured thrifts could be at a serious competitive disadvantage in deposit, loan and capital markets. Both insurance conversions and industry exits by healthy institutions, which already are occurring to some extent despite the moratorium, would further reduce the FSLIC's income stream. Some thrifts are selling off branch offices and their deposit liabilities. In addition, higher assessments probably encourage additional risk-taking in an attempt to provide stockholders with a competitive return and to ensure continued access to the capital markets. This could cause the FSLIC's future costs to rise. Higher FSLIC assessments

also could reduce the franchise value of FSLIC-insured institutions relative to that of FDIC-insured institutions, thereby discouraging capital investment. Finally, if higher assessments cause the overall costs of FSLIC insurance to exceed its benefits, the role and importance of FSLIC insurance in the U.S. financial system would decline quickly.¹³

Ignoring these and other risks enables the estimation of how much money might be raised by mortgaging the FSLIC's projected assessment income over the foreseeable future. For example, as much as \$8 billion might be raised today by borrowing against the FSLIC's expected income from its current regular assessment over the next ten years, and perhaps \$24 billion by mortgaging this income stream over the next 30 years. Alternatively, expanding the FSLIC assessment base to include liabilities generally covered by insurance, e.g., unsubordinated borrowings, and doubling the regular assessment rate to two-twelfths of one percent could generate an additional \$0.9 billion in annual income if deposits were to remain at mid-1988 levels, and more if those liabilities were to grow. On a capitalized basis, the resulting \$1.7 billion in annual assessment income over the next ten years could raise as much as \$17 billion today. Capitalized over 30 years it might raise upwards of \$50 billion. If the FSLIC's present regular and special assessments were maintained for ten years and continued to generate their present proceeds, \$16 billion to \$20 billion might be raised. The potential borrowings would be larger if funded by the federal government, particularly if funded at the short-term Treasury bill rate, since agency borrowing costs always significantly exceed the costs of direct Treasury borrowing.

A second alternative to finance the FSLIC shortfall would be to require FSLIC-insured institutions to make a one-time capital contribution of some percent of deposits or maintain an equivalent noninterest-bearing deposit contribution with the insurer.¹⁴ A substantial sum could be raised, but not without significant long-term risks to the thrifts and their insurer. With a one percent of deposits contribution, neither alternative would provide more than \$10 billion in the aggregate and only about \$7.5 billion on balance, based upon first-quarter 1988 data. At least 25 percent of the aggregate contribution would come from insolvent and unprofitable S&Ls, which would increase the FSLIC shortfall by at least a corresponding amount. Moreover, either action would substantially reduce the capital of the S&L industry. Industrywide tangible capital of only \$6.3 billion would disappear altogether; the \$40 billion in capital at the solvent institutions also would decline by about \$7.5 billion, which would hurt their future earnings and market values.

A third financing option involves capturing the net worth or future earnings of the FHLBs, which are "owned" by the S&L industry. Although their book net worth presently totals about \$15.4 billion, only about \$2.0 billion of the \$2.8 billion in retained earnings are truly unencumbered and available. Other retained earnings are already pledged as collateral for the current \$4 billion in FICO borrowings. Nearly all of their retained earnings will be pledged when the FICO borrowings reach the legal maximum established by the CEBA. Additional resources for the FSLIC shortfall might be available if the market value of the FHLBs' stock exceeds book value, as is the case for the Federal Home Loan Mortgage Corporation (FHLMC). The \$12.6 billion in stock is held principally by FSLIC-insured S&Ls and carried on their books at that amount. Even if it were legally possible to appropriate this stock,

which is doubtful, doing so would reduce the S&Ls' tangible net worth by the stock's book value, thus offsetting all or most of the reduction in the FSLIC shortfall from this source. S&Ls' future earnings and market values also would suffer as a consequence.

Mortgaging the future earnings of the FHLBs, which averaged about \$1.4 billion in 1986 and 1987, might raise upwards of \$14 billion if mortgaged over ten years, and \$42 billion if mortgaged over 30 years. Appropriation of these earnings, however, would negatively affect S&Ls' earnings, since the FHLBs pay dividends to their member institutions according to their pro rata stock ownership position. In addition, appropriation could have significant adverse ramifications for the future role of the FHLBs and the advance window function.

FDIC Financing

The FDIC's current and anticipated financial resources are, by themselves, insufficient to resolve the FSLIC insolvency. Moreover, earmarking a substantial proportion of these resources for the FSLIC shortfall could imperil the FDIC's effectiveness and its financial and political independence. In addition, use of the FDIC's available resources for the FSLIC resolution would not provide any federal budgetary benefits: the projected deficit would rise dollar for dollar with any outlay by the FDIC.

The FDIC insurance fund is projected to fall below \$15 billion at year-end 1988, down from more than \$18 billion at year-end 1987. This decline will have occurred despite investment income and assessment income in excess

earnings which originate primarily from banks. This alternative could provide sufficient funds to eliminate the current shortfall and totally recapitalize the FSLIC fund could decline further, since the number of bank failures will remain high beyond 1989.

The first option could generate substantial new income for the FSLIC shortfalls. Expanding the assessment base to include liabilities generally covered by insurance could increase the FDIC's current annual assessment income by about \$600 million. Doubling the insurance premium to 16% basis against non-share financials could generate an additional \$3.3 billion annually if the projected incremental cash flows were realized, and the FDIC's asset independence base between \$8 billion and \$21 billion might be raised today by capitalizing these flows over the next ten years.¹⁷ The same time, the FDIC's credit flow in the income regulatory requirements assessments may well be inconsistent with the goals, policies, and decisions of an independent FDIC.¹⁵ This financing option raises several concerns. Most important, a substantial assessment increase could threaten banks' financial well-being and market positions, increase bank risk-taking, and weaken the banking business and the FDIC industry structure, and greater potential and importance of federal deposit insurance.¹⁸ That was the case for S&L industry costs to be increased (or significant portion of the bill for S&L industry's things would be unfair to pass on all or a portion of these additional costs to more customer could weaken the competitive advantages granted thrift institutions by both the federal and state governments.¹⁶ Moreover, some of these competitive advantages would continue for at least several more years regardless of how the FSLIC's shortfall is resolved. This could cause some banks to seek, for many purposes to reach, bank capital standards. The thrifts' other advantages avoid the additional superior geographic and product authorities (including assessments, and/or costs by whatever means available. Foreign deposit insurance assessments, and/or

affiliation authority), advance window borrowing authority, tax benefits, and ownership of the FHLBs also would likely continue for some time after the resolution of the FSLIC shortfall. Several of these competitive advantages might even be made permanent. For example, similar advantages were grandfathered for bank holding companies in the original Bank Holding Company Act and for nonbank bank holding companies in the CEBA. Moreover, it is unclear that any operating or other regulatory constraints would be imposed on FSLIC-insured thrift institutions to eliminate or significantly reduce the advantages they enjoy.

Speculation that the FDIC's assessment income could be increased by a sufficient amount to fund, or substantially fund, the FSLIC shortfall are addressed in the next section.

FDIC-Insured-Bank Financing

Three options for helping to finance the FSLIC shortfall involve FDIC-insured commercial banks and savings banks (banks) more directly than the options calling for FDIC assistance. First, Congress could authorize the FDIC to increase its assessment base or rate temporarily in order to reduce the FSLIC shortfall. Second, Congress could require the Federal Reserve to pay interest for as long as necessary on bank reserves on deposit at the Reserve Banks. The funds thus raised would be paid to the FSLIC or the entity financially responsible for the closure of failing and insolvent thrifts. Third, Congress could require the Federal Reserve to finance the FSLIC resolution from its annual net earnings over the next four or five years,

earnings which originate primarily from banks. This alternative could provide sufficient funds to eliminate the current shortfall and totally recapitalize the FSLIC.

The first option could generate substantial new income for the FSLIC shortfall. Expanding the assessment base to include liabilities generally covered by insurance could increase the FDIC's current annual assessment income by about \$600 million. Doubling the insurance premium to 16.7 basis points on the new base could generate an additional \$2.3 billion annually. If these estimated incremental cash flows were realized, and if the FDIC's costs did not increase, between \$8 billion and \$23 billion might be raised today by capitalizing these flows over the next ten years.¹⁷ At the same time, the FDIC would retain the income from its current rate of assessment.

This financing option raises several concerns. Most important, a substantial assessment increase could threaten banks' financial well-being and market positions, increase bank risk-taking, change the banking business and financial-industry structure, and alter the role and importance of federal deposit insurance.¹⁸ As was the case for S&Ls, any assessment increase (or customer fee) could reduce the banking industry's earnings. Efforts to pass on all or a portion of these additional costs to customers could weaken the market positions of FDIC-insured banks relative to other financial intermediaries that would not bear such costs. To the extent the banks' efforts were unsuccessful, pressures on banks' earnings and profit margins would increase. This could cause some bankers to pursue riskier, higher-yielding activities, and others to attempt to avoid the additional costs by whatever means available. Foreign-deposit insurance assessments, for

example, could end foreign deposit-taking and increase other foreign borrowing. In this case, expanding the assessment base would not raise any additional revenues for the insurer. Insurance assessment increases also could give rise to considerable industry exit and industry consolidation.¹⁹

The second option, requiring the Federal Reserve to pay interest on reserve requirements, has several advantages. First, it could generate between \$25 billion and \$40 billion if the expected payments were capitalized over the next ten years. Second, this option would not weaken the banking industry, the FDIC, or the Federal Reserve. Third, following initiation of payments to the banking industry, a major hidden tax on the industry would be eliminated and banks' earnings pressures would be eased. The nonpayment of interest on reserve requirements is unjustified: it is not an implicit payment for Federal Reserve System services, nor should it be. These services ought to be priced appropriately and paid for according to use; otherwise, inefficiencies and inequities would exist. Similarly, interest payments on reserves should go to the reserving institutions, and not to the general benefit of the banking industry or the Treasury Department. This proposal would at least begin to correct current inequities and inefficiencies in these areas.

The payment of interest on reserves, however, has one major shortcoming. It would adversely affect the federal budget since the Federal Reserve's earnings, which pass to the Treasury each year, would be correspondingly reduced.

The third option is to have the Federal Reserve, i.e., banks primarily, finance the entire FSLIC shortfall. The Federal Reserve System's cumulative earnings over the next three to five years would amount to between \$60 billion to \$100 billion, depending upon the time frame. Capitalizing this income would provide sufficient funds to resolve the FSLIC shortfall and recapitalize the resulting insurer. This option, unfortunately, would give rise to a corresponding increase in the federal budget deficit, assuming other federal revenues and expenditures remain relatively unchanged.

Public Financing

The federal government is an obvious source for funding the FSLIC shortfall. It could fund the FSLIC shortfall by itself or authorize the off-budget FICO (or some new limited-life, off-budget government agency) to borrow the necessary funds with federal government assistance. The success of the borrowing would be assured if the government guaranteed both the principal and interest payments as it did in creating the Farm Credit System Financial Assistance Corporation in January 1988.²⁰

Of course, the alternatives could have substantially different budgetary effects. Full and immediate federal government funding would give rise to equivalent budgetary pressures over the next two or three years; the second alternative could defer the bulk of these pressures and spread them out over a more lengthy period, perhaps 15 years or more.

Federal government financial assistance to the FSLIC may be appropriate. First, the government has played a significant role in the problem's development. For example, restrictions enacted in the 1930s on competition and products have contributed historically to the proliferation and perpetuation of poorly run financial institutions and institutions with significant interest-rate risk exposure. Federal income-tax policies and incentives also have contributed to thrifts' concentration on real-estate financing and interest-rate risk exposure. Removal of some of these regulatory restraints on competition, subsequent changes in federal tax policies and incentives and bankruptcy laws, and the government's inflationary policies of the late 1970s have resulted in a major shakeout of the thrift industry. The federal regulatory and insurance system for thrift institutions, which was established in the 1930s, also has contributed to S&Ls' and the FSLIC's current problems, as discussed in the next section.

Another argument favoring federal government assistance is that the government has publicly recognized its liability for the FSLIC shortfall during the past few years, but failed to "book" it. The Congress twice has announced unlimited federal government support of the FSLIC deposit insurance system during the last few years. Moreover, federal intervention and assistance have been provided to troubled industries or companies of importance to regional or national economies (see Chapter 8).

A counter-argument to federal assistance is that it could lead to complete politicalization of the federal deposit insurance and financial regulatory systems, which, in turn, could have dire consequences. This threat might be reduced, however, by providing federal government assistance rather

than full and direct federal funding, particularly if provided through a new limited-life financial agency separate from the FSLIC but with authority to raise the necessary funds for the FSLIC shortfall. The government could warrant repayment of both principal and interest on the agency's borrowings.

Overview of Financing Alternatives

After careful review, it is apparent that the FSLIC shortfall far exceeds the agency's financial resources, even if its future income from regular and special insurance premiums were mortgaged over the next several decades. Clearly, S&L resources also are inadequate, given the size of the shortfall and the financial condition of the industry. As indicated, substantial funds could be raised by the FSLIC, the FHLB System and the industry, but not without threatening their future viability.

Tapping the financial resources of the FDIC and/or FDIC-insured banks poses similar risks. Such action could endanger the operations of the agency and the insured institutions, possibly altering their roles in the overall structure of the American financial system. Moreover, any effort to increase banks' insurance assessments could threaten the industry's future viability in the same manner as would efforts to increase assessments on FSLIC-insured thrifts.²¹ Finally, bank funding of the FSLIC shortfall would be unfair and inequitable, particularly if thrifts' competitive advantages over banks continued after the resolution of problem.

All of these financial alternatives also would have the same federal budgetary impact as direct Treasury funding of the FSLIC shortfall, since the FSLIC and the FDIC are on-budget agencies and the Federal Reserve System turns its annual net earnings over to the Treasury Department. Use of these alternatives, absent other changes, would sharply increase federal budgetary pressures within the next two years as most of the FSLIC resolution costs would be incurred within that time period, and, in turn, sharply increase Gramm-Rudman deficit-reduction pressures.

If the FSLIC or the FDIC were to be utilized for funding, however, the budgetary impact could be deferred by taking the FSLIC and the FDIC off-budget. Use of the Federal Reserve System's earnings, however, would impact the federal budget in exactly the same way as would a Treasury financial solution.

Although federal government financial assistance may be necessary and appropriate to help solve the FSLIC shortfall, such assistance could result in the complete politicalization of the federal deposit insurance and financial regulatory systems. This would not be in the Nation's best interests.

The threat of politicalization as well as the budgetary effects of federal assistance might be lessened if a new limited-life, off-budget financial assistance agency were created separate from the FSLIC but with a federal government guarantee of principal and interest repayment. The budgetary impact could be spread over an extended period of time as the Treasury made the necessary interest or principal payments on the debt of the new agency.

Regulatory Solutions

Opinion is sharply divided over whether the FSLIC should be entrusted with the funds and responsibility to resolve its problems or whether another agency should be given this responsibility. Specifically, should the resolution of the FSLIC's financial shortfall be part of a major restructuring of the federal deposit insurance system and federal financial regulatory structure? The answer hinges on the short- and long-run cost implications of the various regulatory options.

Several options are available for the regulatory resolution of the FSLIC shortfall:

- o Recapitalize the FSLIC;
- o Merge the FSLIC (and perhaps the NCUSIF) into the FDIC, or merge all into a new insurance agency;
- o Grant FDIC insurance to solvent S&Ls, either as thrifts or commercial banks, and have the FSLIC or another entity close and sell currently insolvent FSLIC-insured thrifts and their portfolios; or
- o Eliminate the FSLIC shortfall but only in conjunction with a major reform of both the federal deposit insurance system and federal regulatory system for financial institutions.

The proposals of others for a regulatory solution to the FSLIC/thrift problems are summarized in Appendix-A.

Option One--Recapitalization of the FSLIC

Two major arguments support recapitalization of the FSLIC. First, because recapitalization is likely to achieve the earliest action by the

Congress and Administration, it could result in the lowest short-term resolution cost. Congressional action strictly on the FSLIC recapitalization could be a politically expedient solution that would address the immediate problem but temporarily defer lengthy and controversial deliberations on thorny financial-reform issues.²²

Second, responsibility for the closure and liquidation of insolvent S&Ls should remain with the agencies most familiar with the problems of these institutions. Some of the most criticized practices and policies of the FSLIC and the FHLBB, including perhaps their support for the creation and continuation of the FADA, may have resulted solely or largely because of their own financial straits. In this regard, the FSLIC and the FHLBB clearly have improved their examination and supervisory policies and practices, tightened the regulatory standards for insured S&Ls, and upgraded their staffs and operating procedures. They appear poised to take appropriate actions on an expeditious basis if recapitalized.

Substantive arguments are raised against recapitalizing the FSLIC absent other reform measures. The major argument is that the FSLIC and the FHLBB historically have not been sufficiently independent of political and industry pressures to take necessary but difficult actions to resolve problems in the most cost-efficient and equitable manner. The situation may have worsened in recent years as a result of the FSLIC insolvency and need for financial assistance.²³ Given this long history,²⁴ and despite some recent evidence to the contrary, the argument has considerable merit.

Major defects mar the present federal insurance and regulatory systems for thrifts and mandate change before the FSLIC and the FHLBB could be entrusted with the funds and responsibility for resolving the shortfall. Structural defects include: the housing advocacy role of the FHLBB, which is stipulated in its charter; the subordinated role of the FSLIC to the FHLBB, and its dependency upon the FHLBB; the failure of the FSLIC to have its own examination force; the investiture of examination and supervisory authority in the regional FHLBs (which are owned and, in part, directed by their thrift constituents); and the politicalization of the FHLBB and the FSLIC.

Other defects relate to the more permissive regulation of thrift institutions vis-a-vis commercial banks and credit unions. For example, S&Ls' equity investment authority, legal lending limits, and capital and accounting standards are much more permissive than are those of FDIC-insured banks.²⁵ Accordingly, recapitalization without significant reforms in these areas could increase resolution costs unnecessarily.

Another argument against recapitalization absent other reforms is the concern that persists over the FSLIC's operations and staff. For example, the jury is still out on the success of the FSLIC's failure-resolution efforts. However, it must be remembered that these deals are difficult to evaluate, and they may be an unfair basis on which to judge the agency's performance and ability given its inadequate financial resources. While the FHLBB has made substantial and rapid progress in restaffing and reorganizing, it is less clear to what extent this holds true for the FSLIC. The successful restructuring of the FHLBB bodes well, however, for similar action at the FSLIC. Good leadership and the ability to pay market wages, above those

offered by the other federal bank regulatory and deposit insurance agencies, have been a successful combination for the FHLBB, and could ensure the success of a recapitalized FSLIC.

A related but different type of reform concern questions the wisdom of maintaining one policy for banks and another, more liberal, policy for thrift institutions. Other financial and nonfinancial businesses are being encouraged to acquire weak or insolvent thrifts in order to minimize the FSLIC's immediate costs. This policy contrasts sharply with the long-standing federal policy of separating banking from commerce and raises important questions. Is there a sound basis for sharply divergent policies for two increasingly similar types of institutions? Could these policies affect the competitive balance between banks and thrift institutions and/or impose additional costs on their respective deposit insurer or the American public?

In conclusion, the FSLIC and the FHLB System should undergo specific reforms before recapitalization is undertaken. These reforms should ensure that the current FSLIC and thrift industry problems will be appropriately and expeditiously handled. They also should ensure that the chances of similar problems recurring are minimized, and certainly no greater than would exist under any other regulatory resolution of the FSLIC problem.

Creation of an independent FSLIC and reform of the FHLB System. The federal S&L regulatory and insurance systems should undergo considerable functional restructuring and regulatory-policy tightening. First, the subordinated and dependent role of the FSLIC should end. It is clearly appropriate for an insurer of depository institutions to have its own examination force and to be

able to take enforcement actions to protect its interests. The FHLBB ought to be subject to the "discipline" of an independent insurance agency looking over its shoulder and examining its member institutions. This could provide some assurance that safety-and-soundness concerns at individual institutions are addressed properly and expeditiously.

Second, the examination and supervisory functions of the FHLBs should be assigned to the chartering authority, the FHLBB, although the income of the FHLBs could still be used to pay the costs of the FHLBB's supervisory and examination function. This change would eliminate an inherent conflict of interest whereby responsibility for examining and supervising the S&L industry resides with the FHLBs.²⁶ S&L industry executives comprise a solid majority of the directors at the individual FHLBs. Although it is argued that the resulting potential conflicts of interest are controlled well and that similar conflicts of interest exist in the bank regulatory system,^{27,28} there seemingly has been considerably more industry influence exerted over S&L regulators than over bank regulators.

The number of politically appointive positions in the FHLBB also should be reduced. Ideally these positions should be confined to the board of director level, with one or two assistants for each director. This is essentially the way the FDIC has been operated and, perhaps because its management consists almost exclusively of career civil servants, the FDIC is generally believed to have been much less influenced by political and industry pressures than the FHLBB.²⁹

Similarly, the FHLBB should be concerned primarily with promoting the safety and soundness of the industry it regulates, rather than with "promoting housing."

Regulatory-policy restraints on federally insured S&Ls also must be tightened. The recommended changes, which are listed below, are generally those endorsed by previous task groups on regulatory restructuring, as well as by former FHLBB Chairman Edwin Gray and some prominent S&L industry executives.³⁰ The general exception is the recommendation that goodwill be excluded from regulatory capital.

A. Regulatory Standards

- o Require that growth be leveraged by an adequate tangible net worth base.
- o Limit S&Ls' direct investment authority to a small percentage of assets for well-capitalized institutions, and prohibit such investments by undercapitalized institutions. This could necessitate a federal override of state thrifts' authority.
- o Restrict the activities of undercapitalized S&Ls.
- o Tighten the limitations on loans to an individual borrower and to insiders.
- o Tighten loan-to-value requirements for "nontraditional" mortgage loans other than one- to four-family residential mortgages.
- o Impose and phase-in commercial bank capital and accounting standards, thus providing for the exclusion of goodwill from regulatory capital.

B. Closure Policy

- o Close or merge institutions, both thrifts and banks, no later than when they become insolvent on an equity capital basis.
- o If "deals" cannot be negotiated to merge insolvent S&Ls without granting acquirers long-term forbearances from capital requirements or large, locked-in spreads on large pools of assets, liquidation should be seriously considered despite its apparent higher short-term cost.

The recent suggestion by the American Bankers Association that the federal government consider creating a limited-life agency or trust to take control of insolvent S&Ls also could serve to increase the independence of the FSLIC and the FHLB System. Not only would such an agency reduce the financial and personnel demands on the FSLIC, it would reduce the political pressures on the FSLIC. However, as is pointed out in the discussion of option three, creation of a limited-life liquidating agency could increase resolution costs.

Option Two--Merger of the Federal Deposit Insurance Agencies

Several arguments have been advanced for merging the federal deposit insurance agencies, or at least merging the FSLIC into the FDIC, as part of the FSLIC resolution. First, this solution would ensure that the thrifts' deposit insurer would act in an appropriate and desirable manner, and foreclose or minimize the possibility that a similar problem could recur in the future. Proponents assert that the FDIC, as the surviving insurer, would be independent, impose more stringent operating and behavioral standards on currently FSLIC-insured institutions, examine insured institutions independent of the chartering authority, take appropriate enforcement actions where necessary, and resolve thrift insolvencies on a timely and cost-effective basis. The FHLBB could remain as the federal thrift chartering and regulatory authority or, alternatively, the OCC could become the sole chartering authority for federal thrifts and banks. Another argument in support of a merger is that it would yield various economic benefits and eliminate any competition in laxity that could result from the presence of more than one

federal deposit insurance agency. The merits of these arguments are discussed below.

The argument that the only assurance of an appropriate resolution of the FSLIC problem and its nonrecurrence is to merge the FSLIC into the FDIC may be of only limited significance. First, it fails to recognize that many of the reasons for the current performance disparities between the two insurance agencies and between their insured institutions would exist after the merger. Second, merger proponents fail to recognize that even a merger might not achieve these goals.

Thrift institutions traditionally have been encouraged by federal income-tax policies and incentives, and forced to some extent by federal and state laws, to concentrate on real-estate lending generally, and long-term lending in particular. In contrast, commercial banks have been encouraged to diversify and engage in shorter-term lending. Absent the elimination of these differential incentives, laws and regulations, thrifts might continue to be more susceptible to certain economic and political developments than the banking industry, regardless of their federal deposit insurer.

There also are some risks that a merger would not achieve its goals and could even undermine the FDIC's financial condition and operations. Because of the politicalization of the thrift regulatory and insurance systems and the size of the FSLIC financial shortfall, Congress could handicap the surviving insurance agency's future operation. The resultant agency could be more politicized than is the FDIC; its financial strength and independence

undermined; and perhaps its examination and supervisory roles reduced vis-a-vis the chartering and other regulatory authorities.

An argument in favor of the creation of a single federal deposit insurance agency is that economic benefits will accrue that are unavailable to the individual insurance agencies. The financial risk of a single federal insurer would be less than the combined risks of two or more separate deposit insurance agencies. Additional risk diversification could result for the single insurer, despite the fact that the earnings of both banks and thrifts are positively correlated.³¹ Another benefit would be greater efficiency and consistency in the handling of failing and failed depository institutions. This would appear to be particularly important in the event of a systemic problem. A further benefit could emerge from the consistent application of common capital and accounting standards, examination procedures, and enforcement authority. A final benefit would result from economies of scale and human-resource gains.

These benefits do not seem sufficient in the near term to justify an immediate merger (although they do for an eventual merger). Substantial short-run gains might emerge in the liquidation area, however, through pooling managerial resources and staff of the FDIC and the FSLIC, standardizing liquidation policies, and managing similiar assets and in some cases the same assets. Thrift failure-resolution costs might be reduced per se and personnel cost savings might result. The extent of such gains would hinge on the FSLIC management pool and liquidation staff: if personnel are inexperienced or otherwise inadequate or insufficient, the gains could be considerable.³²

In other areas, the immediate benefits of a merger do not appear significant. For example, insurance diversification gains would not be substantial: both thrifts and banks are impacted by the same economic forces and, as a consequence, their performances are closely related. Realizable near-term economies of scale also appear limited to the data processing and systems analysis areas. Finally, the possible benefits from ending the alleged competition in laxity between the deposit insurers appear nonexistent. If such competition does exist, as has been argued historically, it presumably is between the chartering authorities, either state or federal, bank or thrift, and not between the federal insurers, per se.

Over the long run, however, the benefits in all these areas from a merger could be substantial. Together they provide considerable support for the eventual merger of the federal deposit insurance agencies.

Three major arguments are raised against merging the federal insurance agencies at this time. First, the resulting insurance agency would not necessarily perform any better than would a recapitalized, restructured FSLIC, and might be significantly weaker than the FDIC. Second, the costs of the FSLIC resolution might increase dramatically and unnecessarily because of protracted Congressional deliberations. Third, the creation of a single federal deposit insurance agency could yield some of the costs associated with any monopoly, i.e., inefficiencies, intransigence, and inappropriate policies.

The argument that the resulting FDIC insurance agency would not necessarily perform any better than a recapitalized and reconstituted FSLIC, and might even be weaker, is based on two premises. First, the thrift

regulatory and insurance agencies acted responsibly and quickly to close insolvent institutions until 1983, when it became clear that their financial resources were overwhelmed by the situation.³³ Second, the financial, political, and industry pressures are so great that in merging the insurance agencies Congress could seriously weaken the FDIC.³⁴ If this were to happen, the potential costs from a merger could outweigh the possible benefits, given a viable alternative. While similar costs could result from recapitalizing the FSLIC, the federal insurance and regulatory systems for the banking industry would not be weakened--a most important consideration.

The second major argument against a merger, that a Congressional decision on this issue would be interminable in coming, thereby significantly increasing FSLIC resolution costs, lacks credence. Congress could provide for an instantaneous or near-term administrative merger of the insurers and their long-term full merger, along the lines of Congressman Kleczka's proposal, H.R. 3970. This would provide most of the immediate advantages of a merger without delaying Congressional action.

The third major argument against a merger of the federal deposit insurance agencies, that a monopoly insurance agency would be created, also does not appear substantive. A system of checks and balances would remain, namely, the thrift and bank chartering authorities, the Congress and the courts.

An administrative merger of the FSLIC into the FDIC. Potential benefits could be realized from an immediate merger of the two insurance agencies or, for the most part, from an "administrative merger" followed by a full merger later.

Under an administrative merger, a common Board of Directors would administer the activities of the FSLIC and the FDIC, including resolution of insolvent S&Ls. Separate books would be kept, however, for the FSLIC's and the FDIC's insurance funds, expenses and revenues. The Board could be charged with returning to Congress within a year with recommendations for further reforms, including the full merger of the two insurance agencies.

The administrative merger approach would substantially reduce the potential costs of a full merger at this time. It could limit and minimize the potential risks to the FDIC's financial, political and industry independence from a full merger. Moreover, the possibility of an administrative merger could speed up Congressional action, thereby limiting FSLIC resolution costs.

An administrative merger also would avoid some of the other problems that could result from an immediate merger. For example, an administrative merger would not slow the processing of the individual agencies' workloads. Potential problems involving cooperation, coordination, staffing, morale, pay differentials, etc., also would be minimized by an administrative merger.

An administrative merger of FSLIC into FDIC is not necessary to resolve the FSLIC shortfall or to prevent recurrence of the problems facing the S&L industry. Strong supervision of the S&L industry and the existence of an independent federal deposit insurer for S&Ls can be achieved without an administrative merger. Nevertheless, the long-term benefits of merging the two agencies could be considerable. If a merger is deemed appropriate, an administrative merger would be preferable to a full and immediate merger.

On balance, merger of the FSLIC into the FDIC is not essential to an appropriate regulatory resolution of the FSLIC and thrift industry problems or their recurrence. However, a merger would constitute a positive step forward toward achieving necessary long-term reform of the federal deposit insurance system structure.

Option Three--FDIC Insurance of S&Ls and Another Agency's Closure of Insolvent S&Ls

FDIC insurance of thrifts and the closure of insolvent FSLIC-insured institutions by the FSLIC or another limited-life government trust or agency could be implemented under several alternative plans. Under the basic plan, the FDIC would insure qualified FSLIC-insured institutions and a limited-life government agency would liquidate or merge into other institutions insolvent FSLIC-insured institutions and assist unqualified institutions. The insurance risks posed by weak but solvent FSLIC-insured institutions unable to qualify for FDIC insurance would remain with the FSLIC or its limited-life replacement. Regulation of these institutions would remain with the insurer and their respective chartering authority.

Alternatively, the FDIC would insure all FSLIC institutions meeting some minimum standards, and the FSLIC or another limited-life governmental agency would deal with the remaining FSLIC institutions. This alternative could expose the FDIC to additional financial loss from weak S&Ls, but a financial guarantee against such losses presumably would be and should be provided to the FDIC. The guarantee could have a limited life such as three years or five years. If an institution were closed within that period, the

full costs to the insurer would be covered by the guarantee. If the institution were solvent but still weak at the end of the guarantee period, the guarantee might be used to provide financial assistance to merge the institution out of existence or to strengthen it sufficiently so as to eliminate the carryover risk to the FDIC.

These alternatives are both hybrids of the option calling for merging the FSLIC into the FDIC. They would create a single federal deposit insurance agency, the FDIC, for banks and thrifts. They also could yield some of the same benefits as an administrative merger of the two insurance agencies. In this regard, they could pose fewer risks to the FDIC than would an immediate full merger of the two agencies. They might, however, substantially increase the ultimate costs of resolving the FSLIC shortfall.

The basic advantage of these plans over a full merger of the FSLIC into the FDIC is that they could at least limit the risk to the FDIC's financial, political, and industry independence. If the FDIC were permitted to evaluate and act on the resulting insurance applications as it has historically, or if a guarantee were available to cover the FDIC against losses from having to insure weak S&Ls unable to meet insurance standards, the financial risks to the FDIC would be contained and its independence would unlikely be threatened. The FDIC's workload would immediately and substantially increase, but by much less than if the two agencies were merged. The other benefits of common insurance assessments, regulation, enforcement, and liquidation policies would be realized, but only for FDIC-insured institutions.³⁵

The unique disadvantage of these plans is that they could increase liquidation and assistance costs substantially relative to the costs of either a FSLIC recapitalization or a merger of the two insurance agencies. The primary concern is that the creation of two distinct categories of institutions based only upon financial condition could result in massive deposit withdrawals and liquidity pressures on the weak and insolvent institutions uninsured by the FDIC (or by the FSLIC under the American Bankers Association's proposal). If this occurred, the costs of liquidating these institutions or assisting them in qualifying for FDIC insurance could increase dramatically and immediately.

Resolution costs also would increase as these institutions' best personnel and loan customers left for more permanent relationships with healthy institutions and any remaining franchise values consequently disappeared. These dangers might be lessened if FSLIC institutions were given up to five years, for example, to qualify for FDIC insurance. During this period, insolvent thrifts would be liquidated and weak institutions encouraged to work toward qualifying for FDIC insurance. Such a plan would dovetail with the plan proposed last year by Congressman Parris.³⁶ However, creating the appropriate system of incentives for owners to strive towards FDIC insurance could be quite difficult because they might not subsequently qualify and could realize additional losses.

A second concern is that these plans might increase liquidation costs if a limited-life agency were created. Presumably, it would be very difficult for such an agency to obtain or retain the necessary quality personnel to properly fulfill its responsibilities. In addition, the agency and its staff

might purposefully prolong the job, thereby delaying timely and appropriate actions. This concern, while credible, perhaps could be resolved by creating appropriate incentives and/or consolidating the agency's personnel into the resulting FDIC.

On balance, the option to create a single insurance agency by limiting and winding down the FSLIC's operations merits serious consideration, but only under two conditions. First, the FDIC's financial exposure from granting insurance to FSLIC-insured thrifts must be limited. Second, the chance must be minimized that substantial liquidity pressures could mount on FSLIC-insured institutions unable to obtain FDIC insurance and thus drive up costs of the FSLIC resolution.

Option Four--Comprehensive Reform of the Thrift Insurance and Regulatory System

Resolution of the FSLIC shortfall only in conjunction with a comprehensive reform of the thrift insurance and regulatory structure would more radically change the status quo than any of the other options thus far considered in this chapter. Under such a comprehensive restructuring, the FHLBB's chartering, regulatory and supervisory authority would be transferred to the OCC, the FSLIC would be merged with the FDIC, and the FHLBB would promote the housing industry through its oversight of the FHLBs (which no longer would supervise member thrifts) and the FHLMC. The OCC would become the charterer and primary regulator and supervisor of federally chartered banks and thrifts. The resultant federal insurer would insure deposits in all qualified commercial banks, savings banks and S&Ls. It would be the primary

federal supervisor of all state-chartered insured institutions, as well as the receiver and liquidator of all insured institutions that fail.

Several arguments exist in favor of such a comprehensive restructuring. The existing system of bank and thrift insurance, regulation and supervision would be streamlined, and uniform standards for federally insured institutions would be promoted. This should reduce the risk exposure of the federal insurer as well as the overall costs of bank/thrift regulation and supervision, and minimize the chance that current thrift industry problems would recur. FSLIC resolution costs also could be reduced if the resulting insurance agency is financially and politically independent.

Arguments also exist against such a comprehensive thrift insurance and regulatory agency restructuring being tied to the resolution of the FSLIC shortfall. Debate over a comprehensive restructuring could be lengthy and delay the resolution of the FSLIC shortfall, thereby increasing resolution costs. Questions about the disparate treatment of banks and thrifts regarding their powers, insurance premiums, taxation and other matters, would be difficult to resolve, as would questions about adequate representation of thrifts' interests vis-a-vis those of banks both with respect to the resulting insurance agency's operations and the OCC's operations. The immediate benefits from such a restructuring also would be small, although its long-term benefits appear substantial. Moreover, any benefits from separate regulatory and supervisory systems for thrifts and banks would be lost. Finally, merger of the insurance agencies could "FSLIC-ize" the FDIC, and transfer of the FHLBB's chartering, regulatory, and supervisory powers to the OCC could create

substantial problems for the OCC with respect to the regulation and supervision of federally chartered banks and thrifts.

On balance, a comprehensive restructuring of the federal insurance and regulatory agency structure for thrifts is less desirable than the creation of an independent FSLIC or an administrative merger of the FSLIC into the FDIC. Despite its considerable long-term benefits, a restructuring is not essential to a resolution of the current FSLIC problem. In fact, a comprehensive restructuring effort could delay the FSLIC resolution and increase the ultimate costs, endanger the independence of the FDIC, and create problems for the OCC.

For similar reasons, resolution of the current FSLIC shortfall should not hinge on a sweeping overhaul of the entire federal financial regulatory system. The argument that to resolve only the current FSLIC problem would delay, and perhaps even undermine, Congressional action on these much-needed reforms is unconvincing, despite public perception that the Congress acts on major issues only when forced to by a crisis. Over the years, concern over the federal regulatory structure and insurance systems for thrifts and all federally insured depository institutions has prompted numerous Congressional, interagency, academic and other private groups to study the structural and insurance issues and propose major overhauls. Generally, they have recommended elimination of overlapping regulatory and supervisory authority and individual agencies' conflicts of interest, and the functional regulation of insured depository institutions. These efforts have increased in recent years and several studies are nearing completion, making it unlikely that action on the FSLIC shortfall would adversely affect such efforts. In fact,

resolution of the FSLIC shortfall would narrow the focus of a federal financial regulatory reform effort, and could result in a more timely and appropriate regulatory restructuring effort.

Conclusions

The FSLIC shortfall is large and growing rapidly. It is imperative that insolvent S&Ls be closed as quickly as possible to prevent further escalation of resolution costs, and that reforms be instituted to prevent another financial debacle.

Financing the FSLIC Insolvency

There are two decisions that must be made regarding the financing of the FSLIC insolvency: the distribution of costs and whether on-budget or off-budget financing should be used.

The S&L industry and the FHLBs should bear as much of the cost of resolving the FSLIC shortfall as possible. Severe constraints exist, however, on the ability of the S&L industry to finance the FSLIC shortfall. The tangible net worth of all solvent S&Ls is only \$40 billion, or four percent of their assets, while estimates of the size of the FSLIC shortfall exceed \$100 billion. FSLIC insurance premiums are now 150 percent higher than FDIC

premiums and amounted to about 67 percent of the average annualized return on assets for GAAP-solvent S&Ls as of the second quarter of 1988.

Continuation of the current FSLIC special assessment could further weaken the S&L industry, increase S&L risk-taking, encourage conversions to less-expensive federal deposit insurance programs, reduce the franchise values of FSLIC institutions and discourage capital investment. Such an outcome could lead to additional S&L insolvencies and further financial difficulties for their insurer. Similarly, appropriating the approximately \$2 billion in retained earnings of the FHLBs or their profits, currently about \$1.4 billion per year, could generate substantial funds but would pose the same risks for the S&L industry, which largely owns these institutions.

The FDIC should not be considered a source of funds to pay for the FSLIC shortfall. Under current budgetary rules, using the FDIC's resources would have no budgetary benefit since it would affect the federal deficit in the same way as an outright Congressional appropriation. Even if these rules could be altered, as is recommended in this Study, attaching the FDIC fund or its income would not be in the public interest. Such an action could "FSLIC-ize" the FDIC, leaving it with insufficient resources to fulfill its mission.

A strong argument can be made that it would be unfair to target banks and other financial-service firms to pay for any of the FSLIC shortfall. They are not responsible for the plight of the FSLIC or its insured thrifts. Moreover, they already have incurred substantial costs as a consequence of being forced to compete with insolvent S&Ls which bid up deposit rates in

order to attract funds to cover their operating losses. Banks also have not enjoyed the same permissive capital regulation, broad geographic expansion and product authorities, or tax subsidies that have been granted FSLIC-insured S&Ls, advantages that would continue for at least several years following most of the proposed resolutions of the FSLIC shortfall.

Another option to finance the FSLIC shortfall is for the Federal Reserve to divert all or part of its annual earnings of about \$17 billion to the FSLIC shortfall, from the Treasury Department, or to begin paying interest on banks' required reserves and divert the expected payments of perhaps as much as \$3 billion to \$4 billion per year. While substantial funds could be generated in this manner, and strong economic and other arguments exist in favor of paying interest on reserves, both of these alternatives would increase the federal budget deficit, dollar-for-dollar.

Another financing option is to levy a tax or fee on a particular service of thrifts, banks and perhaps other financial institutions, to be paid by the institutions' customers. The incidence, equity, and full ramifications of such a tax would be difficult to assess. Moreover, it could even prove counterproductive, driving down the business and earnings of these financial institutions and potentially creating further problems for their insurer, while perhaps generating little income for the FSLIC shortfall. Great care and study would be necessary to determine whether an equitable tax could be imposed that would yield significant revenue for the FSLIC shortfall without unduly harming the financial institutions, the extent to which such a tax would substitute for general tax revenues, and whether it would be preferable to the use of general tax revenues.

In addition to deciding who pays for the FSLIC shortfall, a decision must be made on the financing mechanism to be used. Substantial borrowing by some governmental or quasi-governmental agency appears necessary. Borrowing by the FSLIC or the FDIC against future insurance premiums or by the Federal Reserve or the Treasury would be "on-budget"; the federal budget deficit would be adversely affected and the Gramm-Rudman deficit-reduction targets rendered unattainable in the absence of offsetting cuts in other programs or increased tax revenues.

Alternatively, under an off-budget financing arrangement, power to borrow to resolve S&L insolvencies could be entrusted to the FICO or to some new limited-life, quasi-governmental agency. In another scenario, the FSLIC or the resulting federal insurer responsible for thrifts could be taken off-budget and given sufficient borrowing authority. In either case, responsibility for the payment of interest and principal on the borrowings could be apportioned among the S&L industry, the FHLBs, or others as decided by the Congress.

Although off-budget financing arrangements may be argued to be a paper charade designed to conceal the costs of the FSLIC resolution, significant arguments favor off-budget financing. For example, to the extent the financing were done on-budget through the appropriations process, further politicalization of the deposit insurance system could result. Such a development would not be in the public interest. While the insurer must be accountable to Congress, we have learned from the FSLIC crisis that the insurer must be able to take action against insolvent and undercapitalized institutions free from short-term political, budgetary and industry

pressures. Off-budget financing could reduce this threat. Off-budget financing also could spread the budgetary impact of an FSLIC resolution, and thereby perhaps hasten appropriate Congressional action and stop the escalation in resolution costs.

Regulatory Restructuring

Preventing the recurrence of existing problems is as important as finding a short-term financial solution. In this regard, it is clear that some change in the structure of S&L insurance and regulation is desirable. The exact form of any restructuring is less important than ensuring the long-term existence of a strong and independent federal insurer with authority to act to protect the integrity of its fund. The fundamental objective of a "regulatory solution" should be strong government regulation of the S&L industry, instead of the de facto self-regulation which was a major cause of the current problems. There are several regulatory options available, including the creation of an independent FSLIC and specified reforms to the FHLB System; a full and immediate merger of the FDIC and the FSLIC, or a more limited administrative merger; the conversion of healthy S&Ls to FDIC insurance, with the remainder being closed by the FSLIC or some other limited-life liquidating agency; or a comprehensive reform of the thrift and/or bank deposit insurance system and federal regulatory agency structure.

A full and immediate merger of the FDIC and FSLIC, or the conversion to FDIC insurance of healthy S&Ls, with the remainder being closed by the FSLIC or some other limited-life liquidating agency, are undesirable options. A

full and immediate merger of the FSLIC into the FDIC could quickly overwhelm the FDIC financially. Common insurance of institutions with vastly disparate authorities regarding asset selection, geographic expansion and affiliation would raise difficulties in the setting of insurance premiums and in the examination process. The question of what, if any, enforcement authority over thrifts the insurer would have relative to the FHLBB would be difficult to resolve satisfactorily and in a timely manner. Finally, political and budgetary pressures associated with the closing of hundreds of insolvent S&Ls could lead to the politicalization of the FDIC.

Granting FDIC insurance to many FSLIC-insured institutions and authorizing the FSLIC or other limited-life agency to close or merge the remaining institutions is also an undesirable option. FSLIC resolution costs could be driven up substantially by the creation of a separate and identifiable class of insolvent S&Ls: massive deposit withdrawals from the institutions quickly could result and liquidity pressures mount, and S&Ls' franchise values could fall as they lost their best customers and personnel. The liquidating agency also could have considerable difficulty in obtaining or retaining quality personnel. In addition, a limited-life agency could have substantial incentives to prolong the job of resolving its caseload of troubled S&Ls, thereby further increasing resolution costs. The FDIC would be endangered if it were required to grant insurance to weak and unqualified FSLIC institutions, unless a meaningful guarantee against financial loss from the eventual failure of these institutions were provided.

Three regulatory options, however, would meet the objectives of ensuring the existence of a strong and independent federal insurer for

thrifts, strengthening thrift regulation and supervision, and minimizing the chance that problems of the magnitude now facing the S&L industry will recur. They are discussed below as "Plan A," "Plan B," and "Plan C." These plans differ in the degree to which they would change the status quo, but all would be meaningful reforms. The deposit insurance reforms suggested in other chapters of this Study, which are summarized after presentation of Plan C, would complement each of these plans.

Plan A--An independent FSLIC. The FSLIC would be separated from the FHLBB and, generally, would mirror the FDIC. As such, it would have a three-person Board including, ex officio, the Chairman of the FHLBB. It would not be subject to the appropriations process and would have the administrative independence of a "mixed ownership corporation" (patterned after the FDIC). It would have flexibility to manage the current crisis subject to general guidelines and standards set forth by Congress. It would be the primary federal supervisor for all state-chartered, FSLIC-insured institutions and liquidate all FSLIC institutions that fail. It would have the same authorities and powers relative to state and federally chartered thrift institutions that the FDIC now has with respect to state and federally chartered banks insured by it (subject to the enhanced authorities recommended in other chapters of this Study). It would have its own examination force. In this regard, it also would be authorized to arrange with the FDIC and other bank regulatory agencies for transition assistance in assuming its new responsibilities. Finally, it could be charged by Congress to make recommendations within one year for further reforms necessary for a strong, independent and effective FSLIC.

The resulting FHLBB would be responsible for chartering, examining and supervising federal thrifts; implementing and administering the Home Owners' Loan Act; and overseeing the FHLB System and the FHLMC. The FHLBs would no longer examine or supervise thrifts; their role would be confined to providing liquidity for institutions meeting "housing" or other specified criteria. System membership would be available to any depository institution meeting these criteria. Over some number of years, these two funding mechanisms probably should be privatized.

This plan is diagrammed in Appendix-B.

Plan B--An administrative merger of the FSLIC into the FDIC. Separate books would be maintained for the FSLIC's and the FDIC's funds, revenues and expenses, until such time as the FSLIC shortfall is eliminated, the current financial problems of FSLIC-insured institutions end, and the individual funds are "adequate" for their respective risk exposures. A five-member Board of Directors, perhaps the FDIC's current Board plus the FHLBB Chairman and an additional outside director, would oversee the insurer's operations as primary federal supervisor of all state-chartered FSLIC- and FDIC-insured nonmember institutions, and liquidator of all its insured institutions that fail. It would have complete authority to determine the administrative structure of the agency. The agency would have at least the same authorities and powers over insured state-chartered and federally chartered thrifts and banks that the present FDIC now has over the banks, subject to the proposed enhancements of such authority as recommended in other chapters of this Study. Insurance premiums would be set in accordance with the authority and standards provided by the Congress. The agency could be required to report to the Congress

within the first year after the administrative merger on other reforms necessary for a strong, independent and effective insurance agency.

The resulting FHLB System would be as described under Plan A.

Plan B is diagrammed in Appendix-C.

Plan C--Comprehensive reform of the thrift deposit insurance and federal regulatory structure. The FSLIC would be merged into the FDIC. Separate books would be maintained for the FSLIC's and the FDIC's funds, revenues and expenses, until such time as the FSLIC shortfall is eliminated, the excessive risk of additional insurance losses from FSLIC-insured institutions ends, and the individual funds are "adequate" for their respective risk exposures. A three- or five-person Board of Directors would manage the FDIC's operations as primary federal supervisor of all state-chartered, nonmember, FDIC-insured thrifts and banks, and liquidator of all FDIC-insured institutions that fail. To foster agency independence, the Board members would have long, staggered, fixed terms--such as at the Board of Governors of the FRS. The FDIC would not be subject to the appropriations process and would have the administrative independence of a "mixed ownership corporation" (patterned after the FDIC). It would have the same authorities and powers relative to federally chartered, FDIC-insured thrift institutions that the FDIC now has with respect to federally chartered, FDIC-insured banks (subject to the enhanced authorities recommended elsewhere in this Study).

The OCC would charter and supervise all federally chartered FDIC-insured institutions, both banks and thrifts, and it would administer the

National Bank Act and the Home Owners' Loan Act. The Comptroller would continue to serve as a Director of the FDIC. The Federal Reserve Board would regulate and supervise all holding companies, both bank and thrift, and would continue to supervise state member banks.

The Department of Housing and Urban Development (HUD), or perhaps the Federal Reserve Board, would oversee the remaining financing operations of the FHLB System and the FHLMC. Over the long term, it may be advisable to completely privatize both the FHLMC and the FHLB System.

This plan is diagrammed in Appendix-D.

Deposit Insurance Reforms Desirable Under All Three Plans

- o The insurer(s) should be "off-budget," or a "separate budget" should be established subject to strict Congressional oversight.
- o The insurer(s) should be authorized within limits to set insurance premiums that reflect loss experience.
- o The insurer(s) should establish minimum acceptable standards for insurance, which the federal chartering authority(ies) must uphold and certify to the insurer that each federal institution which it charters meets these standards.
- o The insurer(s) should have expedited authority to terminate insurance in six months or less to protect the integrity of its fund.
- o Insured institutions in holding companies should be required to guarantee their insurer against losses caused by other insured institutions in the holding company.
- o The insurer(s) should be required to adopt uniform standards of regulation and supervision for banks and thrifts immediately, and where necessary provide a schedule for their implementation over time.

FOOTNOTES

¹See Brumbaugh and Carron (1987), p. 353.

²Ibid., p. 354.

³See Brumbaugh (1988). Brumbaugh's Table 2.8, p. 52, indicates that FSLIC-insured institutions had assets of \$651 billion at year-end 1981. Table 2.7, p. 50, indicates these institutions had a market-value net worth of -17.3 percent of assets, or -\$113 billion.

⁴See Auerbach and McCall (1985), pp. 17-21.

⁵The FHLBB adopted net worth rules in January 1985 which required institutions to obtain specific supervisory approval to grow at an annual rate of 25 percent or more in a six-month period. See "Joint Statement of Gerald J. Levy, Herbert M. Sandler, and Donald B. Shackelford," before the Committee on Banking, Housing and Urban Affairs of the United States Senate, August 2, 1988, p. 15. The authors claim (pp. 15-18) that the growth regulation was not enforced.

⁶According to Frederick Wolf of the GAO, FHLBB officials "estimated the capital ratios of the new institutions created through the first six Southwest Plan mergers as between 0 and 3.6 percent as calculated using regulatory accounting principles." See "Budgetary Implications of the Savings and Loan Crisis," Statement of Frederick O. Wolf, Director, Accounting and Financial Management Division, Before the Committee on the Budget, United States Senate, October 5, 1988, p. 9.

⁷See Vartanian, et. al. (1988), pp. 2A-2B.

⁸The Financing Corporation (FICO) was created by the CEBA as an off-budget, limited-life agency with authority to borrow more than \$11 billion in financial markets to fill the FSLIC shortfall. Annual borrowing limits exist. Principal repayment is to come from zero-coupon bonds purchased by the FHLBs; interest payments are to come from the FSLIC's special assessment income.

⁹See French (1988).

¹⁰Other proposals for attaching the future earnings of FSLIC-insured institutions have been discussed publicly, including the levying of a mortgage-loan origination fee on FSLIC-insured institutions or their customers. The effect of such a levy or other proposals that would put FSLIC institutions at a competitive disadvantage with FDIC-insured institutions would be similar to that from differential deposit insurance assessments.

¹¹Unless otherwise specified, funding-capability projections in this paper assume annual deposit growth rates of five percent and ten percent, respectively, and a discount rate of ten percent.

¹²Similar conclusions would hold if the costs of FSLIC insurance were increased by other means such as levying a mortgage-loan origination fee or deposit fee on customers of FSLIC-insured institutions.

¹³If the overall costs of deposit insurance, including assessments, capital and other costs ever exceed the benefits of such insurance, the role and importance of federally insured depository institutions and federal deposit insurance in the U.S. financial system would decline dramatically. The full ramifications of this are important and should not be ignored in any deliberations over increasing the costs of federal deposit insurance.

¹⁴The National Credit Union Share Insurance Fund (NCUSIF) underwent a successful recapitalization in 1984 by requiring its insureds to maintain a noninterest-bearing contribution with the agency in an amount equal to one percent of deposits. However, its situation was quite unlike that of the FSLIC. The NCUSIF was solvent at the time and its insured institutions generally were healthy.

This contributory system of insurance nevertheless has serious shortcomings. See McCall (1988), pp. 40-46. The shortcomings prevail whether or not regular insurance assessments are waived as they are for NCUSIF-insured credit unions. Under this system, insured institutions are permitted to capitalize their contributions, thus having to realize a writedown or writeoff of their contributions if the insurer uses these funds to cover operating losses and expenses. This probably would occur at a time of great difficulty for the industry when it least could afford to take any additional losses to capital. Moreover, the insurer would have to ask for an additional contribution from its members or reimpose regular or special insurance assessments, either of which also would adversely impact the institutions. This was the plight of the private deposit insurance funds and their members in the first half of the 1980s. Another problem with this type of insurance system is that the noninterest-bearing capital contribution generally would be more costly to insured institutions than the current 8.3 basis point insurance assessment.

¹⁵See McCall (1988) for a full discussion of deposit insurance programs and other federal insurance programs in the U.S..

¹⁶See Haywood (1987), pp. 12-16 and Saulsbury (1986), pp. 1-24.

¹⁷These projections are based upon annual deposit growth rates of five and ten percent, respectively, and a discount rate of ten percent.

¹⁸These would be very serious concerns indeed if the assessment increase were substantial, if the resulting costs of deposit insurance were to approach or exceed its benefits, or if all federally insured depository institutions would not realize the same relative insurance costs and benefits.

¹⁹Deposit insurance is partly responsible for the current structure of the banking and thrift industries. Absent the creation of deposit insurance in the 1930s, both industries would be much more highly concentrated than at present, with far fewer institutions.

²⁰The Farm Credit System Financial Assistance Corporation was created in January 1988 to assist the troubled Farm Credit System over the next five years. Some of the Farm System's Federal Land Banks, Intermediate Credit Banks, Banks for Cooperatives, and associations were bankrupt or nearly bankrupt, and unable to continue to meet farmers' credit needs. The Assistance Corporation is authorized to raise \$4 billion within the next five years by issuing 15-year debt. The U.S. Treasury is to pay all interest on such bonds for the first five years, and up to half the interest during the next five years, depending upon the unallocated retained earnings of the Farm Credit System. Thereafter, the Treasury is only to pay the interest if those payments cannot be made by the Farm System. The Treasury also guarantees full repayment of the principal if sufficient funds for repayment are unavailable from the System.

²¹The key factors that would determine the severity of assessment increases would be the size of the increase, the resulting insurance cost-benefit relationship, the extent to which all federally insured depository institutions would realize the same costs and benefits from insurance, the degree of competition from other insured and uninsured financial institutions, and the extent to which additional costs could be passed on to customers.

²²To ensure that both the short-term and long-term costs of recapitalizing the FSLIC are minimized, the policies and practices of the FSLIC and the FHLBB must be carefully reviewed.

²³Consistent with this, for example, are the recent transfer of supervision of Lincoln Savings and Loan (Irvine, CA) from the San Francisco Federal Home Loan Bank to the FHLBB in Washington, D.C., and the recent non-renewal of H.J. Selby's employment contract as Director of Regulatory Affairs at the Dallas Federal Home Loan Bank. Selby had a reputation as a tough regulator and is a former Senior Deputy Comptroller for Bank Supervision, OCC.

²⁴For elaboration, see Brumbaugh (1988), pp. 26-27 and Herman (1969), pp. 923-957.

²⁵Saulsbury (1986), pp. 1-10.

²⁶The boards of directors of the FHLBs reportedly are separated from the supervisory function by a "Chinese wall."

²⁷Granted, there are potential conflicts of interest in bank regulation as well. State member banks are supervised by the Federal Reserve Banks, which have bankers serving on their boards of directors. National banks are regulated by the OCC, which is charged with promoting the national banking system. The FDIC also must weigh public-policy objectives other than bank safety-and-soundness in its decision-making.

²⁸Although concerns would remain over the independence of the FHLBB, in part because of such actions as the recent supervisory transfer of Lincoln Savings and Loan, the FHLBB should be better able to be independent than are the District Banks.

²⁹The National Commission on the Public Service believes that politically appointive positions extend too far down into the ranks of many government agencies. See The Washington Post, 30 October 1988, p. A21.

³⁰"Items Recommended for Inclusion in a Proposed Sense-of-the-Senate Resolution to Strengthen the Thrift System at a Time of Crisis," by Edwin J. Gray, Past Chairman, FHLBB, at the request of the Committee on Banking, Housing and Urban Affairs of the United States Senate, August 4, 1988, pp. 1-2. Also see Levy, Sandler and Shackelford (1988), pp. 3-4.

³¹See Eisenbeis and Wall (1984), pp. 6-19.

³²The potential benefits in the liquidation area may be substantial despite the fact that both the FSLIC and the FDIC have had substantial experience closing and liquidating institutions; both are disposing of weak and insolvent institutions through the sale or assistance of whole thrifts and banks, where all or nearly all of the assets are retained in operating institutions and not taken over by the receiver; and both have had considerable outside counsel from Wall Street firms and others on how best to resolve the largest failures.

³³For example, more than 200 thrifts were closed in 1982, at which time it presumably became clear that the agency's resources were totally inadequate to the task at hand. Subsequently, thrift closings declined dramatically and objectionable actions were taken by the FSLIC/FHLBB.

³⁴The magnitude of the FSLIC financial shortfall is so substantial, the existing pressures on the federal budget so large, and individuals' financial interests so great that the Congress might be unwilling to provide both the necessary funds for resolving the FSLIC shortfall upfront and sufficient independence for the responsible agency. A more likely scenario, and independent of the regulatory solution, might be to fund the shortfall on a provisional basis, *i.e.*, requiring Congressional or the OMB requests for funds and review (read: politicalization). Most certainly, any public funding of the shortfall is likely to limit the resolving agency's political independence. Whether or not this would be egregious is impossible to assess. What is clear, however, is that the insurer's financial, political and industry independence are critical to sound and timely decision-making.

³⁵This could ensure that the healthy FSLIC-insured institutions do not pay for the unhealthy institutions. However, as previously discussed, healthy thrifts cannot and should not be expected to pay for the FSLIC shortfall. Such efforts generally would be expected to endanger the healthy institutions.

³⁶Congressman Parris's proposal is described in Appendix-A.

APPENDIX-A: MAJOR PROPOSALS FOR RESOLVING THE FSLIC PROBLEM

1. American Bankers Association ("The FSLIC Crisis: Principles and Issues--A Call to Action," September 20, 1988, Washington, D.C.).

Immediate Actions Recommended: i) Halt the growth of insolvent and nearly insolvent thrift institutions; ii) increase the pace of liquidating insolvent institutions by eliminating constraints on personnel and administrative procedures, and by making full use of FICO borrowing authority and full use of FHLB lending to the FSLIC; and iii) extend the advantageous tax treatment of FSLIC assistance.

Near-Term Actions Recommended: i) The FFIEC should research and document deficiencies in thrift regulation, supervision and accounting practices and formulate a plan of correction, making their findings public; ii) Congress and the relevant Executive Branch agencies should examine current procedures for resolving failing thrifts and, if necessary, develop a new framework, possibly involving a limited-life corporation, for closing failing thrifts; and iii) Congress and the relevant Executive Branch agencies should: a) examine the extent to which the special thrift insurance assessment has been counterproductive (*i.e.*, tending to produce further insolvencies); b) review all methods of utilizing thrift resources which would not create additional insolvencies; and c) examine additional sources of funds for closing insolvent thrifts, taking care not to weaken other depository institutions in the process.

Longer-Term Actions Recommended: i) Bring thrift regulation, supervision and accounting up to bank standards; ii) decide how to fund closing of insolvent S&Ls without using FDIC resources; iii) permit bank holding companies to acquire and operate insolvent thrifts; iv) institute deposit insurance reforms including greater reliance on market discipline to help prevent recurrence of problems; and v) reconsider whether a specialized housing credit system is needed.

2. National Council of Savings Institutions ("Report of the FSLIC/FDIC Study Group," December 6, 1988, Washington, D.C.).

Deposit Insurance: i) Grant FDIC insurance to all FSLIC-insured institutions meeting FDIC capital standards or having a reasonable prospect of attaining these standards over a specified period of time; and ii) FDIC would be given supervisory and regulatory authority over these institutions, authority which could be delegated.

Closure and Liquidation of Other FSLIC Institutions: i) The FSLIC or other limited-life agency would close and liquidate or otherwise dispose of insolvent FSLIC institutions, and assist others in meeting FDIC standards; ii) this agency would operate independently of the FHLB System; iii) it would be discontinued after five years, unless Congress extended its life; and iv) resolution of these problem institutions would occur gradually over a five-year period.

Funding the FSLIC Shortfall: i) The retained earnings of the FHLBs; ii) FSLIC borrowing directly from the U.S. Treasury or from the capital markets with a federal government guarantee; iii) Congressional removal of these expenditures from the Gramm-Rudman-Hollings targeting and sequestration process; and iv) encourage new capital investment in FSLIC institutions by eliminating the special assessment, avoiding reregulation of their powers, and providing acquisition tax incentives.

The FHLB System: i) The FHLB System and the FHLBB would be preserved; ii) the FHLB System would support housing and the eligibility requirements for using the System would be expanded to include commercial banks, credit unions, and others; and iii) the FHLBB would preserve the "dual banking system."

3. U.S. League of Savings Institutions ("Federal Deposit Insurance and the Savings Institution Business," U.S. League of Savings Institutions, November 1988, Washington, D.C.)

Preserves: i) The FHLB System as a device for providing members with advances, while expanding the membership base of the System to include commercial banks meeting a qualified thrift lender test; ii) a separate system of regulation, examination and supervision for savings institutions; iii) tax subsidies for S&Ls; and iv) broad product and operating authority of unitary S&L holding companies and S&L service corporations.

Regulatory Reforms: i) Establish strong, risk-based capital rules for all financial institutions, with grandfathering and transition rules provided as appropriate; ii) require all financial institutions to follow the same auditing rules and adopt generally accepted accounting principles with appropriate transition rules; iii) require prudent liability shrinkage for all GAAP-insolvent institutions; iv) explore capital-based limitations on loans to one borrower, below-investment-grade corporate debt securities, commercial real-estate lending, and short-term brokered deposits; v) use the same underwriting standards for loan participations and purchases as for loan originations; vi) establish common appraisal standards for all insured institutions; vii) increase the minimum number of directors from the local community necessary to obtain an S&L charter; viii) tighten change-in-control laws; and ix) increase the FHLBB/FSLIC's authority to use conservatorship and receivership powers before insured institutions reach insolvency.

Insurance Reforms: i) Discontinue the FSLIC's special insurance assessment; and ii) do not require the S&L industry to pay for any more of the FSLIC shortfall.

Regulatory Restructuring: None.

4. Congressman Stanford Parris (Congressional Record, April 28, 1988, H 2693 - H 2696); also Carter Golembe, "Memorandum Re: The Savings and Loan Problem; A Review of Organizational Options," CHG Consulting, Inc., Delray

Beach, FL, September 13, 1988; also Bert Ely "Bailing Out the Federal Savings and Loan Insurance Corporation," Ely & Company, July 21, 1986, Alexandria, VA.

Deposit Insurance: Healthy S&Ls would transfer to FDIC insurance (as thrifts or banks) after paying an exit fee to the FSLIC.

Closure of Insolvent S&Ls: i) The FSLIC would be responsible for closing (over three to five years) the remaining S&Ls that are unable to convert to FDIC insurance; and ii) taxpayer dollars would be used only after all FSLIC income and the retained earnings of the FHLBs had been exhausted.

5. H.R. 3970 (A bill sponsored by Congressman Kleczka, February 18, 1988).

Deposit Insurance: i) The FDIC would manage the FSLIC and NCUSIF insurance funds in addition to its own fund; ii) the FDIC would consult and cooperate with the FHLBB and the NCUA in its management of the funds; iii) the FSLIC's responsibilities for termination of insurance and other enforcement actions would be transferred to the FHLBB; and iv) the three separate insurance funds would be maintained until their merger on January 1, 1993.

Regulatory Restructuring: The regulatory responsibilities of the FDIC, the OCC, the FHLBB, the NCUA and some of those of the FRB would be consolidated in 1997 in a newly created Federal Depository Institutions Commission.

6. "A Blueprint for the Restructuring of the FSLIC," (by Thomas P. Vartanian, presented at The Garn Institute of Finance Annual Conference, November 12-15, 1988, Key Largo, FL).

Deposit Insurance: i) Create a new Federal Deposit Council with administrative authority over the FSLIC and the FDIC to administer the funds of the two agencies, collect and allocate future deposit insurance premiums between the two agencies as it deems necessary, and determine the level and nature of future insurance assessments; ii) impose risk-based insurance assessments and capital requirements, using the risk-based capital requirements applicable to commercial banks; and iii) impose market-value financial-reporting requirements on insured institutions.

Closure and Liquidation of Market-Insolvent Thrifts: i) A new limited-life liquidating trust, FSLIC II, would be created to take control of all market-insolvent thrifts (MITs) with the option to do deposit transfers, bridge operations, or combine the MITs into healthy, interstate institutions (Recons) with only performing assets and sell them; ii) MITs until sold or liquidated would be operated only under FSLIC-approved business plans and supervisory agreements, their depositors would receive only market interest rates plus an equity interest in the trust's liquidation of MIT assets, and their shareholders and bondholders could buy warrants or rights in an assisted institution; and iv) Recon acquisition incentives to be offered would include exemption from affiliate transaction restrictions, waiver of management interlocks

generally, imposition of limited capital-maintenance requirements, and provision of new operating and investment powers such as insurance underwriting.

Funding FSLIC II: i) The proceeds from the sale of Recons; ii) current and future insurance premiums paid by banks and thrifts; iii) proceeds from MIT asset liquidations, including public and private investments in FSLIC II securities collateralized by assets and backed by a U.S. Treasury guarantee of principal and interest; and iv) taxpayer subsidies.

The FHLB System: i) The FHLB System and the FHLBB would be generally preserved; ii) the FHLB Board would be replaced by a single agency head with a seven-year term of office; and iii) the FHLBB and the FSLIC would be removed from civil service operating and contracting restraints, thus enabling the agencies to offer appropriate salary and financial incentives to their employees.

7. Financial Assistance Similar to that Provided the Farm Credit System (Agricultural Credit Act of 1987, January 6, 1988).

The Act establishes the Farm Credit System Assistance Board to oversee federal assistance to the Farm Credit System. The vehicle for providing this assistance is the newly established Farm Credit System Financial Assistance Corporation which can issue a specified amount of 15-year bonds, the proceeds of which are to be used to buy preferred stock of the assisted institutions.

The U.S. Treasury will pay all interest on such bonds for the first five years, and up to one-half of the interest for the next five years, depending on the unallocated retained earnings of the System during such five years. The U.S. Treasury also will guarantee payment of principal and interest on Financial Assistance Corporation bonds in the event other sources of payment are insufficient. The U.S. Treasury also has recourse to System institutions in connection with payments by the U.S. Treasury under the Act.

System institutions are required to make a one-time purchase of stock of the Financial Assistance Corporation, the amount of the purchase to be based on the excess of unallocated retained earnings of the institutions over specified percentages of the assets of the institutions. The proceeds of the stock purchase will be held in a trust fund to provide a source of payment on the bonds if the institution(s) primarily responsible for payment of such bonds should default.

Relevance for the FSLIC Problem: Similar arrangements could be made to assist the FSLIC. A one-time or ongoing contribution from the S&Ls could be obtained and a newly created off-budget agency set up to borrow funds to close insolvent S&Ls. The Treasury could pay specified amounts of interest and guarantee principal repayment on the borrowings. The S&L industry contribution could be applied to principal repayment. Remaining principal repayment and remaining interest payments could come from the federal deposit insurer (and indirectly the insured institutions) based on

the condition of the insurance fund, i.e., when the fund exceeded some specified fraction of insured deposits the excess would be applied to interest and principal.

Chapter 10

CONCLUSIONS

This Study has argued that deposit insurance exists to enhance the workings of the financial system by all but eliminating bank runs as a means of closing banks. Bank runs are viewed as a form of market failure that can have deleterious effects on the money supply, the payments system, and financial intermediation. Bank runs can inflict systemic damage when contagion arises, and isolated damage when runs on individual banks occur. In addition to these ex post effects, there are ex ante costs in the form of underproduction of bank services in response to the threat of runs.

The potential for bank runs arises because banks issue liquid liabilities to fund assets that are not easily marketable because outsiders cannot value them easily. This intermediation is a valuable source of liquidity in the economy, but it carries with it the potential for bank runs. Depositors who believe that other depositors may withdraw their funds also have an incentive to do so. This fragility can lead to systemic effects if a run on a bank triggers runs on other banks. Contagion can disrupt the payments system, impeding the flow of goods and services throughout the economy. If contagion involves a flight to currency, remedial action is necessary by the central bank to avert a collapse of the money supply.

Even if contagion does not result, there are costs associated with isolated bank runs. These costs arise because, once the bank has drawn down its normal inventory of liquid assets to satisfy withdrawals, it must begin to

sell off its illiquid assets. By holding these illiquid assets, banks fund productive investment by borrowers who do not have direct access to credit markets because of the informational costs of evaluating and monitoring their creditworthiness. As a result, banks have private information about these assets; and because efficient markets for these assets do not exist, there are deadweight losses associated with their premature sale.

In addition to the ex post costs of contagion and liquidation, there are ex ante costs associated with the threat of a bank run. In response to the threat of runs, a bank may choose (or depositors may require it) to hold more liquid assets, thereby reducing desirable investment by the class of borrowers lacking direct access to markets. Alternatively, the bank may respond to the threat of runs by funding illiquid assets with fewer liquid liabilities, thus reducing the overall liquidity available in the economy.

The costs associated with bank runs are market failures that prevent an economy from achieving the "first-best" allocation of resources associated with perfect markets. Consider a fictional economy from which bank runs had been exorcised without cost. In this ideal economy, banks also would provide liquidity and hold assets for which markets had not arisen. The activities of banks also would include those activities that were complementary to this intermediation. Bank owners would earn a competitive return on capital, borrowers would pay rates reflective of the risk of the loans, and depositors would demand deposit rates reflective of the riskiness of the bank's portfolio.

The presence of the threat of bank runs makes this result unattainable. In an economy without government intervention, market

participants would take steps to mitigate problems arising from bank runs. Depositors would require banks to choose portfolios that made bank runs either less likely or less damaging; as a result, banks would substitute marketable assets for nonmarketable assets. In addition, depositors would charge banks a risk premium that reflected not only the portfolio risk mentioned above, but also included a component to reflect the risk arising from the threat of bank runs. Bank closings would be triggered by the actions of nervous depositors and would likely spill over into other areas of the economy. Closure and bankruptcy laws would need to address the discontinuity in the value of bank assets, i.e., the distinction between going-concern value and liquidation value. This may involve higher capital levels, early closure, or extended liability for bank owners. All of these effects imply a diminution of bank services relative to the ideal economy.

Credible deposit insurance removes the incentive for depositors to participate in bank runs; if deposit insurance were costless, the ideal allocation of resources would result. Of course, deposit insurance cannot be provided free of cost because the problems that create the need for deposit insurance also hamper the insurer's ability to provide perfect insurance. Ideally, the insurer would like to have depositors charge banks a risk premium that included only the portfolio-risk component, and not the "bank-run" risk component. Unfortunately, the insurer is not able to expose depositors to the one risk without also exposing them to the other. To the extent that depositors charge banks for that risk, the costs of bank runs, even if runs do not occur, are implicit in the system and, therefore, the economy moves away from the ideal allocation. Alternatively, the insurer itself would like to charge banks the portfolio-risk component as an insurance premium; however,

the insurer cannot know precisely what the premium is. Nor can the insurer solve the problems resulting from the discontinuity of the value of bank assets.

The result is that banks do not face the same deposit costs nor hold the same assets that they would in the ideal world. This is the distortion that results from deposit insurance. Depending on the corrective steps the insurer takes, the deposit insurance economy may have, relative to the ideal economy, more or less funding of nonmarket assets, more or less provision of liquidity, and more or less risk-taking.

To minimize the distortions of deposit insurance while maintaining stability, the insurer seeks to rely on market forces that are not associated with bank runs. This means putting owners and managers at risk for portfolio choices. However, because these parties' risk-return decisions will not coincide with the insurer's, the insurer must take steps to prevent banks from transferring risk from themselves to the insurer without compensation. These measures include the monitoring of banks through bank examinations, the implicit pricing of deposit insurance through regulation and supervision, and closure policies that enforce desirable market discipline and that preserve bank asset values.

Can deposit insurance work well? If the criterion is the ideal world, the answer is no--unless the problems faced by the insurer are insignificant, in which case deposit insurance is unnecessary. If the criterion is the laissez-faire world, it is reasonable to believe that the benefits of eliminating bank runs could outweigh the costs of a well-run deposit insurance

system. Of course, a poorly administered system could inflict costs in excess of its benefits.

Does deposit insurance work well? The past decade has raised doubts in many minds. Many observers feel the current system is fundamentally unstable and that major reforms are necessary to prevent complete collapse of the system. This view typically holds that the instability is presumed to have arisen over the past decade because 1) deregulation has removed explicit controls on risk-taking, 2) increased competition has reduced the charter value of banks, thus reducing self-control on risk-taking, and 3) deposit insurance has not responded to the need to replace these controls. The empirical evidence for this view currently derives primarily from the plight of the FSLIC, and proponents argue that while the FDIC may appear healthy at this point, the FDIC is in fact on the same path as the FSLIC, simply a few steps behind. Such a prospect understandably has led to calls for major reforms. The impact of many of these reforms would be a movement toward the laissez-faire world, either by imposing depositor discipline, lowering the return on bank capital, or prohibiting the intermediation performed by banks (the narrow-bank proposal). This implicitly reflects a judgment that the costs of the current system outweigh the benefits.

As the reader of this Study has, no doubt, realized (and perhaps expected), the FDIC does not share that view at this time. Rather, the view here is that over the past decade, the banking and thrift industries have been subjected to major economic shocks and that the difference in the condition of the two insurance funds reflects both the different problems faced and responses taken by the respective regulatory authorities.'

When reasonable observers can hold starkly contrasting views on the same issue, it is fair to ask under what conditions the subscriber of a particular view would change his or her mind. Regarding the issue at hand, the relevant questions are as follows: What events would have to occur in order for proponents of major reform to find the current system imperfect, but acceptable? Conversely, what events would lead the FDIC to conclude that major reform is necessary? While it is doubtful that any events could lead to clear and complete conversions, it is reasonable to focus on the performance of the banking industry over the next several years. Proponents of major reform presumably expect the situation to deteriorate, with bank failures becoming more frequent, more costly and leading to further erosion of the insurance fund. Those who call for modest reform expect, assuming that reform is achieved, the situation to stabilize, with fewer bank failures over time and a return to growth of the insurance fund.² Thus, the issue should, and presumably will, be revisited in the coming years.

Along with holding the view that a well-run deposit insurance system is possible without imposing the costs of bank runs, the FDIC is acutely aware that a federal deposit insurer needs both the ability and incentive to act effectively. A practical guideline is to model its behavior after that of a private insurer. Chapters 5 through 8 presented the supervisory, forbearance and closure policies felt to be necessary for effective insurance. Chapter 8 also discussed the need for an assessment procedure that would provide the insurer with the financial means, at all times, to focus on long-term considerations rather than sacrificing these for short-term savings.

In addition, as outlined in the FDIC's Mandate for Change, insurance coverage should be confined to the appropriate scope of bank activity only; this means protecting only banks, and placing expanded powers of banking organizations in nonbank entities. Similarly, the insurer should do nothing to prevent the banking industry from finding the appropriate scale of activity, both in terms of the number of banks in the industry and the volume of assets held by banks. This means allowing exit from the industry and continued elimination of branching restrictions. It also requires allowing innovation that may result in substitution away from traditional banking activities toward new activities that may fall outside the deposit insurance umbrella.³

Providing the insurer with the capacity to act effectively is not enough; the insurer also must choose to act effectively. This requires independence from short-run political and budgetary pressures. It also is preferable to separate the chartering and insuring agencies, so as to provide some checks and balances between the two functions.

The federal insurer must be accountable to the political process. This requires establishing and announcing operating policies, and justifying deviations from such policies. This also requires disclosure on behalf of the insurer, so that its actions may be scrutinized by banks, financial markets, the media, Congress, academics, and other interested parties.

This Study has addressed the issue of deposit insurance reform in light of both the recent experience of the financial-services industry and innovations in the view of banks' role in the economy. Federal deposit

insurance is a potentially constructive solution to a form of market failure. The introduction of deposit insurance, however, brings with it a new set of potential costs, the costs associated with being unable to perfectly monitor and price portfolio risks. As recent events have made clear, these costs can be significant. Nevertheless, we maintain that the benefits of deposit insurance far outweigh the costs if the system is appropriately structured and prudently managed. In order to accomplish that end, we have stressed the need to enhance existing forms of market discipline; to strengthen supervision so that overly risky behavior is detected and controlled in a timely manner; to maintain strict capital standards and ensure that insolvent institutions are promptly closed; and to provide insuring agencies with the proper incentives so as to facilitate the long-term viability of the deposit insurance system.

FOOTNOTES

¹While it is useful to compare the FSLIC and the FDIC, one has to guard against belaboring the comparison. The circumstances faced by the two insurers were not identical, and one cannot draw ironclad conclusions. Nevertheless, the recent experience of both agencies can provide insight into the conditions necessary for effective deposit insurance.

²Some proponents of major reform will not be persuaded by a resurgence of the banking industry, feeling instead that the system is, a priori, unstable, and that any calm will be temporary. At that point, however, the burden is on those observers to clarify their position. It is not enough to: 1) point out that a deposit insurance economy does not achieve the first-best allocation; that is the definition of second-best; 2) appeal to models that derive instability by ignoring constraints and objectives that, in fact, are present in the system, or 3) point to a limited period during which the insurer suffered losses; presumably a deposit insurer provides intertemporal insurance.

³Some argue that advances in information systems and financial markets have reduced the need for the traditional banking services of evaluating and monitoring borrowers. Evidence of this change is the securitization of bank assets, in which loans are made by the bank, bundled together, and sold to the securities market. Bryan (1988) has suggested a reorganization of the banking industry that would essentially require this process for all loans. While this may be the future structure of banking, it seems reasonable to allow that structure to develop on its own rather than imposing it at this time.

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