# THE FUTURE OF DEPOSIT INSURANCE: AN ANALYSIS OF THE ALTERNATIVES

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As of January 1989, the Federal Savings and Loan Insurance Corporation (FSLIC) listed approximately 340 federally insured savings and loan institutions as insolvent. Estimates of the cost of meeting obligations to the insured depositors of these insolvent institutions run from \$90 billion to about \$285 billion.<sup>1</sup> But such estimates refer to the cost net of recoveries, which means that the initial outlays needed to close the insolvent institutions could be much higher.

FDIC Chairman William Seidman has estimated that as many as 700 to 800 FSLIC insured savings and loans with an aggregate \$400 billion in assets will ultimately need to be sold, reorganized, or liquidated.<sup>2</sup> Because the FSLIC's cash reserves have dwindled to less than \$2 billion, the fund cannot close its insolvent institutions without substantial outside assistance. And indeed, Congress is now considering legislation that would authorize up to \$50 billion in additional borrowing to close or merge the most deeply insolvent thrifts.

Although the commercial banking industry and its insurance fund, the Federal Deposit Insurance Corporation (FDIC), have fared somewhat better than the thrift industry, the past decade has witnessed record numbers of bank failures. While the FDIC claims to face no backlog of insolvent banks under its supervision, the caseload of "troubled" banks remains high by post-Depression standards. In fact, the agency recorded its first annual loss in its 55 years of existence in 1988. The fund's net worth dropped 23 percent, from \$18.3 billion at the end of 1987 to \$14.1 billion as of the end of 1988.<sup>3</sup> While sufficient to deal with any failures foreseeable under present circumstances, the reserves could prove inadequate in the event of a major economic dislocation such as a recession or massive defaults on loans to less developed countries.

The Shadow Financial Regulatory Committee, a group of prominent academics, bankers, and attorneys who analyze and comment on matters of financial regulation, has estimated that the true net worth of the FDIC approaches zero if the agency were to establish reserves for foreseeable losses.<sup>4</sup> To be sure, not all would agree with such dire estimates. What is important, however, is the growing consensus that the financial difficulties associated with federal deposit insurance are not confined to the thrift industry and the FSLIC alone.

## **Current Initiatives**

By now it is recognized that further deterioration in the financial condition of the federal deposit insurance funds could have potentially devastating consequences for the taxpayer. In response, the executive and legislative branches, along with the federal bank and thrift regulatory agencies, have already proposed measures to deal with the problem. The proposals range in scope from changes in capital requirements to a complete overhaul of the thrift industry's regulatory structure. Three of the more noteworthy are described below.

*Risk-based capital* In the summer of 1988, representatives of twelve major industrial nations agreed on a uniform set of bank capital guidelines based on the riskiness of a bank's asset portfolio. In the United States, banks and bank holding companies will phase in risk-based capital guidelines through 1992. While one may argue with specifics of the proposal, it clearly marks an advance over previous regulation of banks for at least three reasons. First, it places implicit costs on certain risky activities. This makes banks internalize some of the costs of taking on added risk while at the same time allowing banks more flexibility than under direct regulation. Second,

<sup>&</sup>lt;sup>1</sup> "GAO Puts Cost of S&L Rescue at \$285 Billion," *The Wall Street Journal*, May 22, 1989.

<sup>&</sup>lt;sup>2</sup> "Questions Arise over Size and Scope of Resolution Trust Corp," *American Banker* (March 17, 1989); see also Peter J. Elmer, "Notes, Guarantees Needed in FSLIC Bailout," *American Banker*, June 6, 1989.

<sup>&</sup>lt;sup>3</sup> "FDIC's Shortfall Hit \$10 Billion in '88," *American Banker* (April 26, 1989).

<sup>&</sup>lt;sup>4</sup> Shadow Financial Regulatory Committee, "The Need to Estimate the True Economic Condition of the FDIC," Statement No. 36, December 5, 1988.

it helps control risky behavior in the form of activities that do not appear on the balance sheet of a bank or holding company. Finally, because it represents a uniform international standard, it permits regulators to impose stricter capital standards without placing banks at a regulatory disadvantage relative to foreign competitors.

Early intervention In December 1988, the Federal Home Loan Bank Board proposed a rule that would allow the Bank Board to close a thrift institution if its net worth had declined to 1.5 percent.<sup>5</sup> The rationale for the proposal is to facilitate early intervention in the event of an insolvency to prevent a troubled institution from plunging more deeply into the red. Such authority would be a clear enhancement of the ability of regulators to protect the deposit insurance fund since it would allow the regulators to act rather than force them to wait until net worth under regulatory accounting principles goes below zero. While one might object that the 1.5 percent regulatory net worth threshold is too low given the distortions inherent in regulatory accounting principles,<sup>6</sup> the proposal is clearly a step toward more effective regulation.

More recently, Comptroller of the Currency Robert L. Clarke advanced a new policy that would result in the more prompt closing of national banks. Under the old policy, national banks were declared insolvent only after primary regulatory capital, which consists essentially of shareholder equity plus loan loss reserves, reached zero. This means banks were only closed well after shareholder equity fell below zero. Under the new proposal, however, national banks would be declared insolvent once shareholder equity falls to zero.<sup>7</sup>

The Financial Institution Reform, Recovery and Enforcement Act On February 6, 1989, the Bush administration announced a legislative proposal detailing a set of wide-ranging reform and recovery measures to deal with the deposit insurance fund crisis. The proposed legislation, titled The Financial Institution Reform, Recovery and Enforcement Act (FIRREA), is now under consideration by Congress. Proposed reforms include:

- Creation of a new deposit insurance fund for the thrift industry under the authority of FDIC.
- Creation of a Resolution Trust Corporation to take over the resolution of all thrift insolvency cases from the FSLIC.
- Creation of a Resolution Funding Corporation with the authority to borrow up to \$50 billion to resolve current insolvencies.
- Reorganization of the thrift industry's regulatory structure. The Federal Home Loan Bank Board would be abolished and only the Chairman of the Federal Home Loan Bank System would remain. The Chairman would be placed under the oversight of the Treasury Department as is now the case with the Comptroller of the Currency. Boards of Directors of Federal Home Loan Banks will be modeled after those of Federal Reserve Banks.
- Uniform capital requirements for banks and thrift institutions. Thrifts have until mid-1991 to have capital up to 6 percent of assets. Further, capital requirements will be based on riskiness of investments.
- Increased deposit insurance premiums for both banks and thrifts.
- Uniform accounting and disclosure standards for banks and thrifts.
- Allowing bank holding companies to acquire healthy thrifts.

In addition, the FDIC has already entered into a contract with the Federal Home Loan Bank Board to place the worst of the insolvent thrifts into conservatorship until final resolution.

The administration's program is important for several reasons. First, it will provide badly needed funding to close or recapitalize the worst of the current crop of insolvent thrifts. Second, it administratively separates the federal thrift chartering agency (the FHLBB) from the industry's deposit insurance agency and severs the close ties between the regulator (the Federal Home Loan Banks) and the regulated industry (thrifts). Many observers have concluded that at least part of the industry's current problems can be attributed to lax regulation arising from the close ties. Third, it brings more uniform regulatory and accounting standards to all insured depository organizations. Under the administration's plan, no one class of institutions will receive more favorable treatment than another. Finally, it shores up the financial condition of the federal deposit insurance funds.

<sup>&</sup>lt;sup>5</sup> Federal Register, January 10, 1989, pp. 826-30.

<sup>&</sup>lt;sup>6</sup> "Statement of the Shadow Financial Regulatory Committee on Risk-Based Capital and Early Intervention Proposal of the Federal Home Loan Bank Board," February 13, 1989.

<sup>&</sup>lt;sup>7</sup> "Remarks by Robert L. Clarke, Comptroller of the Currency, before the Annual Convention of the Independent Bankers Association of America," Comptroller of the Currency News Release, March 1, 1988.

Regulators will be able to deal with future insolvencies more promptly.

The need for reform Treasury Secretary Nicholas Brady's statement describing the administration's plan contains the following desiderata:

- "Never again should we allow a federal insurance fund that protects depositors to become insolvent.
- Never again should we allow insolvent federally insured deposit institutions to remain open and operate without sufficient private capital at risk.
- Never again should we allow risky activities permitted by the states to put the federal deposit insurance funds in jeopardy."<sup>8</sup>

In other words, it is not sufficient to simply deal with the current crisis. On the contrary, it is necessary to ensure that there are no repetitions of what happened to the savings and loan industry.

The administration plan is an important first step toward eliminating the possibility of such a recurrence, but it also recognizes the need for additional measures to ensure the financial stability of insured depository institutions. It calls for a comprehensive study of the deposit insurance system by the federal bank and thrift regulatory agencies. Thus, one may expect a continuing public debate over the role of deposit insurance and reform of the bank regulatory system even after the sweeping legislation is enacted. In an attempt to provide some current perspective on these subjects, this paper will examine a number of different proposed reforms. The ensuing discussion will cover some of the more noteworthy reform proposals advanced by academic economists as well as those advanced by the federal bank and thrift regulatory agencies. Before looking at the specific proposals, however, it is helpful to review more generally the goals of bank regulation and the limits of just what such regulation can reasonably be expected to accomplish.

#### **Regulatory Reform**

Deposit insurance: Why reform is needed Federal deposit insurance lessens the incentive of depositors to run on banks when they hear of impending problems at particular institutions. As a result, it has been widely credited with stabilizing the banking system and making it safer. Indeed, for its first forty-five years or so the system appeared to work as intended. But there is a paradox inherent in deposit insurance. By making banks<sup>9</sup> safer for individual depositors, the banking system as a whole has been made less safe. Among private insurers it is widely recognized that insuring an individual against the risk of loss lessens the insured's incentive to attempt to prevent the loss from occurring. This tendency is known as *moral hazard*. Moral hazard arises in connection with deposit insurance because depositors are relieved of the need to pay close attention to the safety of their banks. This in turn removes some of the discipline that otherwise would inhibit bank owners and managers from engaging in practices that threaten the soundness of their individual institutions and thus the deposit insurance system.

When banks and thrifts have access to insured funds, their "downside" risk is limited because they can easily fund risky investments and loans by issuing insured deposits. The incentive for excessive risk taking exists because bank shareholders do not bear the full cost of the risks assumed by the bank. If the bank fails, shareholders bear only part of the cost. The rest is borne by the deposit insurance funds. But if the outcome is favorable, shareholders collect all the profits. Because a substantial portion of the risk can be shifted to the deposit insurance funds in such a manner, bank managers have incentives to engage in excessively risky behavior. And this incentive is most pronounced among institutions that are either approaching insolvency or are already insolvent. Under the current system, such institutions have little to lose and everything to gain from taking on large risks in a desperate attempt to restore financial solvency before they are taken over by regulators.

In the absence of deposit insurance, depositors would be exposed to losses in the event of a failure. They therefore would have the incentive to restrain banks engaged in risky behavior by demanding a premium reflecting the risk associated with a bank's activities or, in cases of impending insolvency, by withdrawing deposits. Indeed, virtually all firms are forced to borrow money at one time or another and are subject to such discipline by their creditors when they do.

But deposit insurance makes banks the exception since depositors could enjoy the high rates but not have to consider withdrawing their insured deposits. This is most obvious in the case of deposit brokers who move deposits of less than \$100,000 around the country in search of high returns in insured banks regardless of condition. Thus any attempt to preserve

<sup>&</sup>lt;sup>8</sup> "Statement by the Secretary of the Treasury Nicholas F. Brady regarding the President's Savings and Loan Reform Program," News Release, Department of the Treasury, February 6, 1989.

<sup>&</sup>lt;sup>9</sup> In the remainder of the article, "bank" refers to all types of depository institutions.

the deposit insurance system must include measures to counterbalance the incentives created by moral hazard.

The moral hazard problem is particularly acute now because of the widespread and justified perception that deposit insurance covers virtually all deposits, especially for large banks. The discipline that might be expected from uninsured depositors is therefore lacking. More seriously, recent attempts to resolve some large bank failures have pointed to the difficulties of imposing costs even on bank holding company debt holders. As a result, no one source of bank funds is likely to bear the full costs arising from the risks a bank takes. In fact, under the current system of de facto 100 percent deposit insurance coverage virtually all parties except the insurance funds benefit from the higher risk.

*New powers for depository institutions* Most proposals for banking reform include granting depository institutions additional powers such as securities underwriting, real estate investment, and insurance. A rationale for the new powers is that bank safety might be enhanced by allowing banks to diversify their income sources among more financial activities. As a quid pro quo for the new powers, the proposals suggest, for example, increased regulation by the Federal Reserve,<sup>10</sup> increased regulation by the FDIC plus a system of "firewalls,"<sup>11</sup> and subordinated debt with firewalls.<sup>12</sup>

Under the current deposit insurance system, however, there are insufficient incentives for banks to control risks even in traditional commercial banking activities. While permitting banks and thrifts to engage in a larger and more diversified group of activities could theoretically work toward reducing risk, the benefits from diversification might not be sufficient to overcome the moral hazard problem. For example, in the early 1980s Congress gave thrifts more liberal investment and commercial lending powers but did not impose any additional measures to monitor and regulate how the thrifts used their new powers. The results of ignoring the moral hazard are manifest in today's thrift crisis.

Most proposals to grant depository institutions additional powers do little if anything to change the incentives in the current system. Increased regulation might limit risk to some extent, but it often invites attempts to evade restrictions. And even if new activities were separated from banks by firewalls, the inducement to shift risks to insured affiliates where possible would still be present. Finally, if insured depository institutions involved in the new activities experience increased failures, the federal safety net, which includes federal deposit insurance and the Federal Reserve discount window, could be called upon to assist firms other than banks and thrifts.

Nevertheless, the trend toward deregulation appears inevitable. It is only a matter of time before depository institutions are given increased powers. But given the incentives inherent in the current system plus the potential risks connected with new activities, it is important that deposit insurance reform be considered at the same time as new powers. As experience with deregulation of the thrift industry has demonstrated, increased powers without corresponding measures to rein in tendencies toward undue risks can invite disaster.

Principles of deposit insurance reform: The role of regulation and market discipline Federal deposit insurance was not intended to end all bank failures. Rather, it was intended to facilitate the quick and orderly resolution of bank failures so as to limit the impact of any one insolvency on the financial system.<sup>13</sup> But perhaps too much is now expected of deposit insurance. Policymakers must recognize that moral hazard is endemic to the deposit insurance system and that it leads some bankers to take risks they would be prevented from taking were deposits not insured.

Risks connected with deposit insurance can be dealt with in two ways. The first is direct regulation of risks through rule making and supervision. In essence, the regulatory approach is designed to compel bankers to act in ways beneficial to the deposit insurance system. By providing a means of monitoring and restraining risks taken by insured banks, regulation of banking can serve the purpose of reducing risks arising from the moral hazard inherent in insured banking. The second way of dealing with risks is market discipline, that is, creation of incentives for depository institutions to control risks on their own. In contrast to direct regulation, market discipline seeks to make it in the economic interests of bankers to act in ways consistent with preservation of the deposit insurance funds by making market participants bear more of the costs resulting from risky activities.

<sup>&</sup>lt;sup>10</sup> E. Gerald Corrigan, "Financial Market Structure: A Longer View," Federal Reserve Bank of New York, *1986 Annual Report*, February 1987.

<sup>&</sup>lt;sup>11</sup> Federal Deposit Insurance Corporation, "Mandate for Change: Restructuring the Banking Industry," (Draft) August 1988.

<sup>&</sup>lt;sup>12</sup> Silas Keehn, "Banking on the Balance: Powers and the Safety Net," Federal Reserve Bank of Chicago, 1989.

<sup>&</sup>lt;sup>13</sup> See Walker F. Todd, "Lessons of the Past and Prospects for the Future in Lender of Last Resort Theory," Federal Reserve Bank of Cleveland Working Paper 8805 (August 1988).

Types of regulation The recent increase in bank failures and the heavy losses those failures have imposed on the federal deposit insurance funds sometimes leads to calls for a return to the regulatory environment of the 1950s. Although it is important to reexamine the adequacy of the present regulatory system, it does not necessarily follow that a return to the regulatory environment of the past holds the answer to the industry's present problems. Regulation can take several forms, and not all regulation of banking can be easily rationalized from the standpoint of maintaining the safety and soundness of the banking system.

One form is geographical regulation, which attempts to limit where banks may do business. Such regulation, which in practice takes the form of branching restrictions and limits on interstate banking, is increasingly viewed as protecting banks and thrifts from competition while doing little if anything to enhance safety and soundness. If anything, such restrictions might make banks less safe because they tend to concentrate loans in one area and limit the ability to gather deposits. Consequently, geographical restrictions have been falling rapidly throughout the 1980s and no one has seriously proposed reinstating them.

Another form of regulation places limits on interest rates banks may pay for deposits. Other than the ban on paying interest on demand deposits, most interest rate regulation was rescinded in the early 1980s. But unlike the case with geographical regulation, there are still occasional calls for reinstatement of interest rate regulation.<sup>14</sup>

It is true that interest rate deregulation has made it possible for many mismanaged institutions to attract funds for excessively rapid growth, and for others to engage in undue risk taking. But calls for interest rate reregulation attack a symptom rather than a cause of the current problems. In fact, interest rate restrictions in an inflationary environment were largely responsible for the disintermediation of funds in the late 1970s. Reregulating interest rates would have the unfortunate effect of penalizing wellmanaged institutions by tying their hands while depositors in search of higher rates move funds to less-regulated competitors.

While geographical and interest rate regulations are not promising ways to control moral hazard in banking, two other forms of regulation are still very much with us. One is product regulation, which limits what banks may sell. While many proposals have been made to deregulate depository institution product offerings, few institutions have actually been given new powers. As noted earlier, however, it is widely expected that product restrictions will fall over the next few years. And given the apparently substantial incentives for banks to evade product regulation, failure to explicitly deregulate product offerings may invite de facto product deregulation by means of loopholes in the law and "forum shopping" for a sympathetic regulator.

The other form of regulation in place today, and the one most heavily relied upon, is supervision and examination of banking organizations in order to monitor and control risks. Such regulation is expected to continue under virtually all reform proposals.

The goal of bank supervision and regulation should be to protect the banking system and the deposit insurance funds by deterring excessive risks and fraud. The goal should not be to deter all failures. As President E. Gerald Corrigan of the Federal Reserve Bank of New York has pointed out, "the freedoms contemplated by the current market environment must include the freedom to fail."<sup>15</sup> Bank regulation, then, should seek to monitor banks so problems can be corrected or an institution reorganized or closed before it becomes costly to its deposit insurance fund.

But, if recent experience is any guide, regulation by itself cannot solve the moral hazard problem. It is simply asking too much of any group of regulatory bodies to be the sole barrier against disaster when the system itself seems to reward those who engage in unduly risky activities. Further, any attempts to strengthen depository institution regulation will run up against a simple fact. Regulation is costly. A look at the total regulatory budgets bears this point out. In 1988, total expenses for federal and state bank regulatory agencies amounted to just over \$1 billion.<sup>16</sup>

No one contends that the amount spent on bank and thrift regulation is excessive in view of the risks

<sup>&</sup>lt;sup>14</sup> For example, a rationale often given for reimposing interest rate regulation is that allowing banks and thrifts to use high rates to compete for funds leads them to seek out riskier loans and investments that hold out the promise of covering the increased cost of funds. See, for example, Letters to the Editor, *The Wall Street Journal*, February 22, 1989.

<sup>&</sup>lt;sup>15</sup> Corrigan, op.cit., p. 50.

<sup>&</sup>lt;sup>16</sup> The estimated expense for the Office of the Comptroller of the Currency, which regulates national banks, was \$229 million. The supervision and regulation budget for the Federal Reserve System, which regulates bank holding companies and state chartered banks that are members of the System, was \$211 million. The FDIC, which regulates state banks not in the Federal Reserve System, budgeted \$167 million, while the Federal Home Loan Bank budgeted \$225 million. Finally, the state bank and thrift regulatory agencies budgeted \$182 million. All regulatory agencies except the Federal Reserve charge for supervision and regulation, so most of the costs are borne directly by banks.

involved. Still, new powers for banks and thrifts are likely to increase the costs of regulation even further. One way to lessen such costs is to develop such regulatory tools as risk-based capital requirements, which levies implicit costs rather than impose explicit regulatory constraints on risky activities. But the additional costs connected with new powers could be reduced even more with measures that are selfenforcing rather than enforced by regulatory authorities. If such measures could be put in place, regulators could concentrate on the problem cases while spending relatively less time on well-run institutions.

Market discipline Safety and soundness might be enhanced if, as a complement to direct regulation, policies and rules could be developed that would give insured depository institutions incentives to voluntarily act in ways that make the system safer. Such measures fall under the rubric of market discipline. While direct regulation compels a depository institution to change its behavior from what its economic interest might otherwise dictate, market discipline makes it in an institution's economic interest to temper risk-taking behavior. Stated another way, market discipline is a self-enforcing variety of regulation.

But market discipline is meaningless unless it is enforced. In particular, any attempt to impose market discipline must ultimately include the possibility of failure. No institution should consider itself exempt from closing or reorganization if it becomes insolvent. If an institution's creditors believe they will be rescued from failure, they will have little incentive to monitor risks and every incentive to tolerate risky behavior. But if creditors face a real possibility of loss, they might be more inclined to keep a close watch on what bank managers are doing. While such discipline might not be sufficient to replace supervision and regulation, it would certainly help the regulators in their job by exerting additional pressure on bank managers to run their institutions in ways that are beneficial to depositors and creditors.

When searching for the optimal mixture of market discipline and regulation, it should be emphasized that the purpose of market discipline is to make failures less likely by making them a real possibility. But this implies that some institutions may allow themselves to be operated in an unsafe manner. Regulation and supervision should focus on those institutions.

Deposit insurance reform, then, has two sides. First, market discipline involves rules that clearly outline the consequences of unsafe behavior and that ensure that accurate information about an institution's condition can reach the public. And for market discipline to be meaningful, bank shareholders and creditors of a failed institution must bear the brunt of the costs resulting from insolvency. Second, it is the responsibility of the regulatory authority to prevent the insolvency from inflicting severe losses on the deposit insurance fund. Thus regulatory reform must begin with new policies governing the way bank insolvencies are handled.

# **Bank Failure Resolution**

Market economies are characterized by continuous change. Every day new firms start up while others fail. But bank failures have always presented a special problem for policymakers. Because bank deposits are used to settle transactions among third parties, they have the potential to disrupt commercial activities and can hamper the normal operations of other solvent banks. Nevertheless, as long as banking remains a private activity whose owners are permitted to profit from calculated risk taking, some banks will occasionally fail.

Under the current system, bank regulators do not normally close an institution until its regulatory capital has been exhausted so economic net worth has long since gone negative. As a result, the insurance fund is exposed to at least three severe problems. First, it is likely the insolvent institution is taking in less income than it is paying out as interest expense. The longer the institution stays open, the longer the losses can grow. Second and more serious, the managers of a troubled institution face the temptation of making extremely risky loans in the hopes that the projects they fund will succeed and thereby generate high returns. But by definition, risky projects also carry a high probability of losses, losses that must ultimately be covered by the deposit insurer and perhaps by unsecured creditors. Third, uninsured depositors, such as they exist nowadays, have time either to withdraw their funds or else to cover their deposits with offsetting loans from the insolvent institution.

The growing number of bank failures in recent years has made plain the need for a better way of handling such failures. The question bank regulators are left with is how to handle such failures without creating undue disruption.

*Early closure* One way of doing this is to establish policies that facilitate the closure of insured banks before they actually become insolvent. Generally, early closure proposals would authorize bank regulators to close an institution before the economic value of its net worth became negative. Ideally such a policy would prevent bank insolvencies from in-

flicting severe losses on the deposit insurance funds. The effect would be to reduce moral hazard by denying managers of failing banks the option of gambling with insured deposits.

One feasible alternative to the current method of dealing with bank insolvencies has been proposed by Professors Benston and Kaufman.<sup>17</sup> Their proposal contains two major elements that incorporate the principles of market discipline and regulatory reform. First, adopt market value accounting to identify problem institutions before net worth becomes negative. Second, mandate that institutions be reorganized or closed if regulatory capital (measured as estimated market value of assets minus estimated market value of unsubordinated debt) falls below a prespecified level. For example, a depository institution could face mandatory reorganization when its capital ratio falls below three percent.

The "bridge bank" authority granted by Congress to the deposit insurance agencies already provides a means for regulators to place insolvent institutions into receivership and to continue operating the institutions until a buyer can be found. To implement the policy proposed by Professors Benston and Kaufman, regulators would need clear legal authority to place an insured institution into such a receivership and to reorganize it before it actually becomes insolvent. Whether such authority now exists or else requires legislation should become clearer over the next few years, especially if the deposit insurance funds are given the authority to revoke insurance in a more expeditious manner than is now possible.

Of course, any comprehensive plan must allow for worst cases. Even under a stated policy of reorganizing depository institutions before they turn insolvent, some institutions will not be closed before their true economic net worth becomes negative. Continental Illinois, for example, surprised regulators as well as the market when the true magnitude of their losses became known. In such a case, it is important that uninsured depositors and other creditors be made to bear losses associated with reorganization. That those depositors and creditors would attempt to run or otherwise avoid losses makes prompt closing all the more necessary as soon as problems become known.

Arguments against prompt closing There are several arguments against prompt closing. The most frequent is that many institutions' problems are the result of

depressed regional economies that will improve over time. For example, banks that lend heavily for real estate development during a boom suffer heavily when the bust comes. But to accept the argument that such problems will disappear over time is to assume that the boom conditions are normal and that the bust is the aberration. It is far more likely that, while some recovery of value might occur as the economy improves, the vast majority of bad loans will still be bad in any but the most vigorous boom. Moreover, keeping insured banks open under such a rationale effectively puts the bank regulatory agencies in the business of speculating on real estate values, the same activity responsible for much of the present crisis in the thrift industry. If the effect of regional economic problems on bank solvency has any validity, it is in arguing against geographical restrictions on bank expansion rather than against prompt closing.

Another argument against prompt closing is that shutting down an institution before it is technically insolvent could be an unconstitutional taking of private property. While such concerns are not to be dismissed lightly, it is likely that prompt closing would not run afoul of federal law or the Constitution. First, the law authorizes regulators to close an institution that is being operated in an unsafe or unsound manner. Second, the Supreme Court may not look kindly on challenges to the constitutionality of a law designed to protect the deposit insurance system by parties who at the same time benefit handsomely from the system's existence.<sup>18</sup> The main challenge is to formulate policies that enable regulators to protect the deposit insurance funds while ensuring that the procedure does not violate rights to due process.

*Regulatory initiatives* Policies of regulatory forbearance have presented an obstacle to the prompt closing of insolvent depositories. For example, regulatory agencies may refrain from closing an institution based on a belief that if given time the management will right the problems that led to insolvency. More important, decisions to close institutions are not made in a vacuum. Rather, they may involve political pressure, explicit or implicit, to favor certain institutions. But even if Congress does declare certain institutions off-limits, it does not diminish the desirability of quickly closing insolvent institutions. It is better that some be closed promptly than none.

<sup>&</sup>lt;sup>17</sup> George Benston and George Kaufman, "Regulating Bank Safety and Performance," in *Restructuring Banking and Financial Services in America*, ed. William S. Haraf and Rose Marie Kushmeider (Washington, D.C.: American Enterprise Institute, 1988), chap. 3.

<sup>&</sup>lt;sup>18</sup> For a detailed analysis of the legal basis for one early closure proposal, see Raymond Natter, "Analysis of FHLBB's Early Intervention Proposal Suggests Legal Basis for Plan," *BNA's Banking Report*, February 27, 1989, pp. 484-89.

While regulatory agencies are likely to want to keep the option of extending regulatory forbearance, they have at the same time proposed prompt closing policies. Among them:

- The Federal Home Loan Bank Board at the end of 1988 requested comments on a proposal that a thrift insured by FSLIC could be placed into receivership or conservatorship if its capital were to fall below 1.5 percent of total assets. The capital level would be sufficient reason for closing, and the FHLBB would not have to make any further showing that the institution was being operated in an unsafe or unsound condition.<sup>19</sup>
- The FDIC has suggested it be given the authority to terminate deposit insurance coverage for an institution on six months' notice if the institution appears to be operating in a manner that threatens the deposit insurance fund.<sup>20</sup> Apparently, the authority could be exercised before market net worth were to become negative. At present, the revocation process can last years. Revoking deposit insurance would have the same practical effect as early closing. The FDIC bases its request for streamlined revocation powers on the desirability of an insurer's having the right to determine whom it insures.
- The Comptroller of the Currency in March 1989 proposed that a national bank be declared insolvent when its equity capital reaches zero.<sup>21</sup> The effect of the proposal would be to exclude loan loss reserves from capital. The rationale is that loan loss reserves simply recognize actual and anticipated losses and do not represent net worth. While not specifically a prompt closing rule, the proposal would move the Comptroller's policy closer to prompt closing.

Any of the above rules would be an improvement over the current system. The first two would explicitly provide for early intervention to block losses. Further, if the Financial Accounting Standards Board eventually were to require the reporting of bank assets and liabilities at market value, the Comptroller's proposed rule would for all practical purposes represent a prompt closing rule. Whatever one's specific preferences, any of the above would go a long way toward protecting the deposit insurance fund from loss.

## Measures to Improve Bank Regulation

Capital regulation Recently, bank regulators from twelve industrial nations agreed on a common set of risk-based capital guidelines for banks. Essentially, the guidelines require that more capital be maintained against relatively more risky activities. Such regulation represents an implicit form of pricing and as such helps make banks aware of the costs they impose on the deposit insurance funds. Of course, risk-based capital is not a perfect solution. The risk categories are rather broad and seem a blunt instrument for dealing with certain risks. For example, all commercial loans are placed in the same category regardless of the creditworthiness of the borrower. Further, until bank accounting conventions are revised to reflect estimates of market values, net worth under the new procedures might still be overstated. But while not a panacea, risk-based capital is an improvement over its predecessor.

The Federal Home Loan Bank Board has issued for comment a set of risk-based capital guidelines for thrift institutions. Their proposal specifically includes a component to reflect interest rate risk,<sup>22</sup> which if adopted would represent an advance over the standards for banks. More recently, the Bush administration has proposed that thrifts be required to meet the same capital requirements as banks. Both proposals would represent an important complement to existing regulation. They would enhance equity by treating all institutions alike and requiring that they play by the same rules. They would enhance efficiency by increasing incentives for depository institutions to control risks.

Because the newer and more stringent capital requirements represent a significant departure from past practices, they have raised a great deal of concern among many in the thrift industry.<sup>23</sup> Opponents of the new capital standards contend that bringing their capital ratios up to 6 percent by 1991 would involve an unprecedented need to raise funds in the market and would drive many otherwise sound thrifts out of business. But while meeting the new standards would present a challenge, those standards would not force solvent but undercapitalized institutions out of business. Instead, it would make it difficult for such institutions to continue supporting their current levels of investment. One could just as easily frame the argument in terms of excessive asset growth leveraged by insured deposits with too little attention to

<sup>&</sup>lt;sup>19</sup> Federal Register, vol. 54, p. 826.

<sup>&</sup>lt;sup>20</sup> Federal Deposit Insurance Corporation, *Deposit Insurance for the Nineties: Meeting the Challenge*, Draft Executive Summary, January 1989, p. 18.

<sup>&</sup>lt;sup>21</sup> "Comptroller's Plan to Change Equity Capital Calculations," *American Banker*, March 3, 1989, p. 10.

<sup>22</sup> Federal Register, December 23, 1988, pp. 51800-820.

<sup>&</sup>lt;sup>23</sup> See, for example, "Bush S&L Plan Draws Heavy Fire," *American Banker*, February 16, 1989; and "Experts Say Goodwill Plan May Stun S&Ls," *American Banker*, March 8, 1989.

capital. In other words, if raising capital would be difficult, thrifts could shrink their asset base until their ratios reach regulatory minimums. It is by no means clear that the current level of thrift assets is consistent with a financially sound thrift industry.

Market value accounting Information concerning the true financial condition of banks could be greatly improved if banks were required to report estimates of the market values of their assets and liabilities. The reason is that market values give the most accurate estimate of a depository institution's true net worth. Put more simply, market values reflect reality more closely than do historical (or book) values. This truth becomes obvious in an insolvency, when the ultimate cost to the deposit insurer is determined by the market value of assets less that of liabilities. Book value of equity is for all practical purposes irrelevant.

In any banking system, changes in creditworthiness or in interest rates might drive the market value of an institution's assets below that of its liabilities. But under current regulatory accounting standards the change would not be reflected as such until loan loss reserves were increased, part of the asset written off, or the asset sold. This is especially obvious with longlived assets such as fixed-rate mortgage loans.

While market value accounting would be a major departure from current practice, it is already being studied by at least two regulatory bodies. First, given the well-documented vulnerability of thrift institutions to interest rate risk, Federal Home Loan Bank Board member Lawrence J. White has expressed interest in developing market value accounting methods for thrifts.<sup>24</sup> Second, the Financial Accounting Standards Board (FASB) published a proposal in 1987 and established a task force in early 1989 regarding reporting of financial instruments at market values or an estimate thereof.<sup>25</sup> Thus some form of market value accounting eventually could be adopted for depository institutions.

Market value accounting would have several advantages for banking policy. First, making market values the standard for determining solvency would reduce the potential losses borne by the deposit insurance funds. If regulators close a bank when its market value first goes negative rather than waiting for book value to go negative, further loss will have been avoided. Second, capital regulation will be more effective if net worth is based on actual values of assets and liabilities. Specifically, measurement of capital ratios under market value accounting would account for interest rate risk and imbalances between asset and liability durations. This would be particularly important in the case of thrift institutions making long-term mortgage loans.

Third, marking assets to market would reduce some perverse incentives existing under the present system to sell high quality assets to realize gains while retaining poor quality assets to avoid recognizing losses. For example, a bank wishing to build up its capital might be tempted to sell a profitable subsidiary in order to realize the gain while at the same time leaving troubled loans on its books rather than sell them at a loss. Under market value accounting, in contrast, the gain in value of the profitable subsidiary and loss on the loan would already be recognized so the bank would have less incentive to sell the good asset.

Despite the desirability of market value accounting, there are reasonable questions about its feasibility. It might be helpful to first consider areas in which market value accounting would present no major implementation problems. First, securities holdings are already reported at market value along with book value in call reports, so there is no obstacle to substituting current for historical values. Most securities held in a bank's investment portfolio are traded on active markets, so there is virtually no information problem in marking such assets to markets. Indeed, securities in trading accounts are already marked to market.

Second, high quality loans of one-year maturity or less or with (at least) annually adjustable rates could be assumed to be at market value. Whatever advantages may accrue from marking such assets to market are probably swamped by the costs. Interest rate risk may exist for such assets, but it is limited by the early repricing opportunity.

Third, loans for which a secondary market exists, such as loans to developing countries, could be marked to market. In fact, Salomon Brothers and Merrill Lynch issue quotes of market values that are reprinted periodically in the *American Banker*. Such loans are to a relatively small and easily distinguished class of borrowers, each of which has sufficient debt outstanding to support market trading. Interested parties sometimes object that market values do not represent the ultimate collectable amount. But such arguments are inconsistent with

<sup>&</sup>lt;sup>24</sup> Lawrence J. White, "Mark-to-Market Accounting is Vital to FSLIC and Valuable to Thrifts," *Outlook of the Federal Home Loan Bank System* 4 (January/February 1988), pp. 20-24.

<sup>&</sup>lt;sup>25</sup> Proposed Statement of Financial Accounting Standards: Disclosures about Financial Instruments. Financial Accounting Series, No. 054. Stamford, Connecticut: Financial Accounting Standards Board, November 30, 1987. See also "FASB Announces Task Force for Financial Instruments Project," BNA's Banking Report, February 20, 1989, pp. 425-26.

conventional economic reasoning. The market value in fact reflects the present value of what is expected to be collected ultimately. It is unlikely that participants in such a sophisticated market would systematically and repeatedly underestimate the value of the debt.

The major area of difficulty for adopting market value accounting is in valuing loans for which no secondary markets exist.<sup>26</sup> While interest rate risk presents few practical difficulties, loan quality is another matter. Unlike loans traded in a secondary market, most other bank loans are dispersed among a large number of heterogeneous borrowers. While loans to the largest corporations might easily be valued, loans to consumers and medium- and smallsized businesses might not.

At present, loan loss reserves (also called valuation reserves) help to move a bank's net worth toward market value. Generally, methodologies for computing such reserves are based on percentages of loans outstanding in various quality classifications. While somewhat inexact, it does serve to help offset the distortions of carrying assets at book values.

A possible solution might be to adjust the values of groups of assets rather than individual assets. At present, banks are actively involved in converting groups of loans, most notably mortgage and automobile loans and credit card receivables, into securities. When loans are packaged into securities, they are priced to reflect certain assumptions about prepayment and default risks. In addition, loan sales between banks are becoming commonplace. The point here is that the knowledge now being developed in the private sector could be used to develop valuation methodologies. The result might be similar to the current practice of offsetting assets with reserves, but the methodologies would be more exact than is now the case.

The actual effects of market value accounting on most banks' portfolios could be minor for those institutions that have followed conscientious loan loss reserving practices. More important, recognizing market values would simply change the focus of where losses are realized from the income statement to the balance sheet. That is, under the current system losses occur over time as an asset valued at its historical cost suffers an impaired income stream. The result is a lower return on the asset. But if the asset were marked to market, there would be a onetime loss of value but the income would now reflect a "normal" return on the marked-down asset.

<sup>26</sup> See David L. Mengle, "The Feasibility of Market Value Accounting for Commercial Banks," Working Paper, Federal Reserve Bank of Richmond, June 1989. Deposit insurance premiums There are three significant aspects of deposit insurance pricing. The first is determining a price sufficient to keep the level of insurance fund reserves at an adequate level. The Bush administration plan to raise premiums for thrifts is in that spirit. Further, the FDIC has suggested that it be given the authority to base rates on a three-year average of net loss experience. The major objection to such authority is that across-the-board rate hikes unfairly penalize soundly run institutions. But unless the insurer can easily distinguish among banks, all pricing schemes (including the current one) will suffer from this deficiency.

The second aspect of pricing is basing the premium paid by a particular institution on the riskiness of its activities. As with risk-based capital, risk-based premiums could enhance equity and efficiency by placing costs on banks engaging in activities perceived to increase risk exposure. Further, the risk-based component of the insurance premium would diminish the perceived inequities of adjusting premiums across the board to reflect loss experience.

Unfortunately, efforts to develop variable prices have not been encouraging. The practical effect of pricing schemes advanced thus far would be to penalize losses after they have been incurred rather than to discourage beforehand the behavior that leads to the losses. In other words, pricing proposals have been based on after the fact observations when their stated purpose should be to modify behavior before the fact.

Banks that engage in risky behavior should be required to bear the costs associated with those risks. Whether the price of added risk should be imposed explicitly in the form of risk-based premiums or implicitly in the form of risk-based capital is essentially a question of ease of implementation. While feasibility now favors risk-based capital, it would be premature to abandon all efforts to develop variable premiums.

A final pricing issue is the base for assessing premiums. The FDIC has suggested that the assessment base be expanded to include secured borrowings from, for example, Federal Home Loan Banks.<sup>27</sup> The rationale is that such borrowings on the liability side are secured by a high quality asset on the asset side. As a result, after a failure the secured lenders would get away with the highest quality assets while the FDIC would be left with more questionable assets.

The FDIC demurred at the opportunity to propose including foreign deposits in its rate base. The

<sup>&</sup>lt;sup>27</sup> FDIC, op. cit., p. 13.

rationale for including foreign deposits is that the current system of de facto 100 percent deposit insurance relieves foreign depositors of losses even if their funds are not explicitly insured. Charging premiums on foreign deposits would simply recognize the reality that foreign deposits are effectively covered and would recover some of the costs of the insurance actually provided. But even if de facto 100 percent insurance were scaled back to a less generous modified payout policy in which uninsured depositors took some losses, foreign depositors would still benefit from the prompt reorganization and immediate availability of all but a small percentage of their deposits made possible by deposit insurance.

The argument against including foreign deposits in the rate base is that money center banks with significant foreign deposits would be handicapped relative to their counterparts in other countries that would not be so charged. But the fact remains that current policy insulates our largest banks from failure and that such insulation must be worth something to the banks. Even if foreign countries subsidize their banks' competition with our own, there is little substance to the argument that our largest banks should be undercharged for the protection they get while the vast majority of banks pick up the additional tab.

State banking powers A final regulatory reform issue involves conflicts between state and federal authority over banking powers. Given the division of authority over banking between the states and the federal governments, it is inevitable that there will from time to time arise some disagreement over what powers depository institutions may prudently exercise. Indeed, it is often pointed out that the most egregious examples of imprudent investment occurred in California and Texas, both of which allowed their state-chartered thrifts powers denied their federally chartered brethren.

Given that depository institutions are insured federally, it makes sense to allow the deposit insurance funds veto power over activities of statechartered federally insured institutions. Otherwise, federal authorities are limited in their ability to control their risk exposure.

### Market Discipline

Short of stationing an examiner in every bank, it is difficult to conceive how direct supervision and regulation can do the entire job of ensuring safety and soundness. But it is likely that if banks were monitored by other parties in addition to regulators the result would be more timely spotting and correcting of problems. One may object that bank stockholders already have incentives to keep a close watch on the actions of bank managers. But monitoring by shareholders is not enough. After all, they are only liable up to the amount of their initial investment. If the bank goes deeply insolvent, the equity may be wiped out but the rest of the bill will be divided among the deposit insurer and unsecured creditors. It seems advisable, therefore, that there should be more parties involved than just the shareholders.

End de facto 100 percent deposit insurance coverage Federal deposit insurance was not designed to protect banks against failure. But most bank failures now involve some type of merger or an even more direct bailout. Because nowadays all depositors and sometimes even debt holders are rescued from bearing any costs in an insolvency, depositors and other creditors have little reason to pay close attention to the condition of their banks. If market discipline is to have any relevance to current policy, then it is imperative that bank regulators pursue all bank failures with rescue of insured depositors only in mind. The sole exceptions should be cases in which an institution is shut down before its market value of net worth becomes negative.

Imposing market discipline on uninsured depositors and creditors would have two significant advantages, especially in the case of a large bank failure. First, by making it possible to close or reorganize institutions before net worth dropped well below zero it would minimize costs to the deposit insurance funds. Consequently, it would also minimize the burden imposed on well-run institutions through deposit insurance premiums. Second, it would provide an added incentive for depositors and other creditors to cooperate with the efforts of regulators to reorganize or liquidate troubled institutions.

One objection to imposing depositor discipline is that individual depositors are not in a position to monitor banks effectively. The objection fails on two counts. First, banks are themselves a major category of uninsured depositors. It is difficult to imagine a group more advantageously situated to monitor a bank's condition than a bank's peers. Second, given that deposits of \$100,000 and less are insured, it is only large depositors that would be expected to bear failure costs. Certainly it is not unreasonable to expect large depositors to possess sufficient sophistication to pay attention to the financial condition of their banks.<sup>28</sup>

<sup>&</sup>lt;sup>28</sup> The FDIC seems to be of two minds on this issue. On one hand, they do not believe in reliance on depositor discipline due to the danger of runs. On the other hand, they do not believe in explicit 100 percent deposit insurance coverage because it would reduce market discipline. See FDIC, op. cit., pp. 14-15.

The simplest method of restoring depositor discipline would be to reduce the current \$100,000 per account deposit insurance coverage. It is not certain how effective such a reduction would be, however, since deposit brokers would probably be able to deal in smaller packages than the current \$100,000 packages they now direct to high-paying institutions. The result would depend on the transactions costs relative to the returns on such deposits. A second method would be limiting deposit insurance for each individual to the statutory amount. The problem with such an approach would be the difficulty of enforcing it for almost 20,000 depository institutions.

A more meaningful way to restore the concept of uninsured deposits would be to return to a modified payout policy in which uninsured depositors receive their funds less a deduction to reflect expected losses. The depositors may receive further distributions if the initial deduction turned out to be overly pessimistic. Such a policy was actually used for dealing with the failure in 1982 of the Penn Square Bank. Further, if a failed bank still had a significant franchise, reorganization might be preferable to liquidation. The deposit insurer could in that event use its "bridge bank" authority to effectively create a new banking organization from the assets and remaining deposits of the old. The bridge bank could then be sold to new owners. Thus, a modified payout policy need not involve liquidation of the failed institution in every case.

Unfortunately, the failure and rescue of Continental Illinois in 1984 sounded a retreat from market discipline. The Continental rescue shows the complications that can arise when attempting to save a bank from failure. Because of covenants written into the debt issued by Continental's parent holding company, federal regulators were virtually forced to rescue holding company creditors along with the bank itself. In other words, not only were all deposits insured but so were other creditors. Similar problems have arisen in Texas with First City Bancorp. and MCorp. Only the failure of First RepublicBank Corp. may have been handled in such a way as to expose debt holders to losses. Only time will tell if the FDIC will prevail against the litigation of First Republic's creditors.

Making market discipline credible Given the problems with the implicit guarantees of bank holding company debt, it is necessary that means be devised to expose both uninsured depositors and bank holding company creditors to the threat of loss. In particular, it would be helpful to develop and make public a policy statement with the following two elements:

- An outline of the procedure to be followed in the event of a large bank failure, including a description of treatment of uninsured depositors.
- An explicit statement that there is no protection for bank or bank holding company stockholders or bank holding company creditors, even for large companies. Especially in the light of a recent Federal District Court decision regarding MCorp in Texas,<sup>29</sup> such a policy might require legislation to make it effective.

Such a policy would be helpful in two ways. First, it would enable the public to plan their actions on the basis of known government policy rather than engage in a guessing game regarding regulators' intentions. Second, as an explicitly outlined procedure it would be more credible than would any policy that relied heavily on the discretionary powers of regulatory agencies. If the policy were credible, it would be more likely to affect behavior in the market than would a policy in which regulators were always expected to flinch when standing face to face with a major failure.

One way to make policy with respect to bank failures more credible would be to place legal limits on the discretion regulators could exercise in dealing with insolvent banks. At present, banks are not subject to bankruptcy law in the same way as other firms. A failing bank does not enter bankruptcy proceedings administered by the judicial system. Instead, a bank is declared insolvent by its chartering agency, which typically places the failed bank into a receivership under the auspices of the deposit insurance agency.<sup>30</sup> To be sure, depositors and other creditors who feel they have been dealt with unjustly by the deposit insurance agency have recourse to the courts. But the judicial system currently lacks the mandate to limit initial payouts to insured depositors only. Given that case law has not been clear on the issue, such a mandate would probably require legislation.

Dotsey and Kuprianov<sup>31</sup> argue in favor of placing bank failures under the jurisdiction of the courts to ensure that the deposit insurance agencies be limited to paying not more than the legally insured amount, which is now \$100,000 per account. Once an insured

<sup>&</sup>lt;sup>29</sup> MCorp v. Board of Governors of the Federal Reserve System, DC STexas, No. 89-1677, June 9, 1989.

<sup>&</sup>lt;sup>30</sup> See George Benston, Robert A. Eisenbeis, Paul M. Horvitz, Edward J. Kane, and George G. Kaufman, *Perspectives on Safe* and Sound Banking. (Cambridge: MIT Press, 1986), chap. 4.

<sup>&</sup>lt;sup>31</sup> Michael Dotsey and Anatoli Kuprianov, "Deposit Insurance and the Savings and Loan Crisis," Working Paper, Federal Reserve Bank of Richmond, June 1989.

bank or thrift were declared insolvent, the court would appoint a receiver and instruct the deposit insurance agency to initially compensate only legally insured depositors.

Of course, for such an approach to be workable, some deposits must be uninsured.<sup>32</sup> As long as all deposits a bank issues are fully insured, there will be little incentive for creditors to force the bank into bankruptcy proceedings. The bank could simply meet all its bills by accepting additional insured deposits, much as many insolvent thrifts have done with brokered deposits in recent years. Therefore, it is critical that at least some depositors be placed at risk of loss so that when the financial condition of the bank becomes questionable it is forced into bankruptcy proceedings or reorganized before it actually becomes economically insolvent.

"Safe Banking" The above measures might seem unduly harsh, if not disruptive, to some. If so, there are two alternatives short of abandoning deposit insurance. One is to stay with the current system. That this would be intolerable is obvious from the current situation. The other alternative is to adopt a "safe banking" system that separates banks' deposit taking and payment activities from risky lending.

There are several such proposals.<sup>33</sup> They generally have in common that they would limit banks to "safe" investments such as government securities and highly rated corporate securities. Commercial lending would be by separate entities funded by commercial paper. The salient characteristic is that depositors would be required to sacrifice the economic gains made possible by the existence of financial intermediaries that combine the functions of offering both payment services and lending facilities in return for virtually complete safety. But under such a system, it is unclear why deposit insurance would be necessary, other than to protect depositors against cases of outright fraud and theft.

It may be too early to pursue such an alternative. But if the moral hazard in deposit insurance cannot be controlled, there may be no other feasible choice.

## Conclusion

Just as the paper began with a paradox, it will conclude with a variation of the same paradox: To make banking safer, it must be made less safe for bank creditors. In other words, unless depository institutions know they can fail and will be allowed to fail, some may not have sufficient incentives to conduct their business in a safe manner.

In order to encourage responsible behavior, several aspects of the current system must change. First, regulators should have the means to deal promptly and firmly with insolvencies before they threaten the soundness of the deposit insurance funds. Second, no institution should be considered too big to fail. Third, no depositors or creditors except those insured under the law should be treated as insured. Fourth, the flow of information to the market should be as accurate as possible. Fifth, explicit and credible policies should be in place for handling future failures.

None of the above measures is meant as a panacea. Some bankers will still make bad loans and as a result some banks will fail. But the above measures should at least help avoid the widespread insolvencies that in the 1980s were the result of the lopsided incentives inherent in the deposit insurance system.

<sup>&</sup>lt;sup>32</sup> The same function might also be served by subordinated debt. Since the interests of the subordinated debt holders and of the deposit insurance agencies might not always coincide, however, proposals that rely on subordinated debt should be looked at carefully.

<sup>&</sup>lt;sup>33</sup> See, for example, Robert E. Litan, *What Should Banks Do?* (Washington, D.C.: Brookings Institution, 1987), and Lowell Bryan, *Breaking Up the Bank* (Homewood, Illinois: Dow Jones-Irwin, 1988).