

Safety and Soundness as an Objective of Regulation of Depository Institutions: Comment on Kareken

I. Introduction

John H. Kareken (in this issue) has provided an insightful survey of a wide range of issues concerning government regulation of commercial banks in the United States. In commenting on his stimulating paper, I shall focus on policies and regulations directed at assuring the "safety and soundness" of banks but shall broaden the discussion somewhat to cover other depository institutions, including savings and loan associations, mutual savings banks, and credit unions. There are important differences between these other depository institutions and commercial banks, just as there are between different sizes of banks, but all the broad classes of depository institutions operate under a general commitment of government to maintain their safety and soundness, and there is considerable similarity in the specific policies used to implement this commitment. No comment will be made on Kareken's discussion of important issues that I believe to be of tangential relevance to the safety and soundness of depository institutions, in particular, merger and acquisition policies for banks, geographic restrictions on bank branching, and bank size and the concentration of financial power. Rather I shall dwell more on the general rationale for government assurance of safety and soundness of depository institutions, on the essential requirements for policies to meet this objective, and on strengths and weaknesses of present policies in satisfying these requirements.

To begin, I shall summarize the wide range of policies used to assure the safety and soundness of depository institutions in the United States. Many but not all of these policies are commented on by Kareken, and the omitted ones deserve at least brief notice. Next, I shall

comment on the general rationale for government assurance of safety and soundness of depository institutions and on the essential requirements for achieving this objective. I shall argue that the government has a much broader responsibility than simply assuring the availability of safe transactions balances for those who wish to hold them. It also has the responsibility of assuring the reasonably efficient and uninterrupted functioning of the economy's transactions and payments mechanism, which is essential for the smooth and efficient functioning of the economic system. Government responsibility in this area is no different, in principle, than the responsibility to assure the reasonably efficient, uninterrupted provision of other essential services, such as transportation and communication services. Fulfillment of this responsibility, however, involves special difficulties because financial failure of the firms that operate the transactions and payments mechanism (including essential credit functions) impairs the transference of financial claims of known and accepted value—the key function of the transactions and payments mechanism.

Turning to Kareken's proposal of a 100% reserve requirement for institutions offering transactions accounts, it is suggested that this would not assure the continuous and efficient functioning of the transactions and payments mechanism. Rather it would stimulate development of financial intermediaries that would undertake most of the essential functions presently performed by commercial banks and other depository institutions, including, perhaps, provision of substitute transactions accounts that would compete with official transactions accounts. Assurance of the safety and soundness of these intermediaries would likely become an objective of government policy of roughly the same importance as exists presently for commercial banks and other depository institutions.

Government insurance of the value of deposits, it is argued, is probably not essential to assure the continuous and efficient functioning of the transactions and payments mechanism. A central bank that adequately performs the function of "lender of last resort" ought to suffice to forestall financial crises that threaten this system through widespread failures of depository institutions. However, deposit insurance does lessen the likelihood of a general financial crisis and provides some assurance that government assistance will be available on a more equitable basis to customers of different classes and sizes of depository institutions.

Avoidance of failures of individual depository institutions, even of the largest commercial banks, is not necessary to sustain the continuous and efficient functioning of the transactions and payments mechanism. What is necessary is that the "customers" of the essential services of these institutions be protected against significant loss and serious inconvenience while the "owners" of these institutions are

made to absorb any losses associated with failure of these institutions. Provided that the regulatory authorities act promptly to require reorganization and recapitalization of institutions in serious danger of insolvency, it should be possible to achieve this objective with little cost to the taxpayer. If uninsured depositors are delegated major responsibility for monitoring depository institutions with respect to their possible insolvency (by requiring such depositors to absorb losses in the event of failure of an institution), then discipline of institutions pursuing policies likely to result in insolvency will frequently occur through runs against such institutions by their uninsured depositors. If avoidance of such runs against individual institutions is to be an objective of government policy (and it is not clear that it should be), then the regulatory authorities must operate in such a way that uninsured depositors are not in serious danger of sustaining significant losses.

Unfortunately, policies presently employed to assure the safety and soundness of depository institutions do not always provide relevant protection to depositors at low expected cost to the taxpayer. Deposit insurance provided without differential charges for different levels of risk, together with implicit government assurances for uninsured depositors (especially in the largest institutions), has discouraged adequate holdings of equity capital by depository institutions. In addition, regulatory authorities have not always been very prompt in requiring reorganization of insolvent institutions, thereby raising the possibility that either depositors or taxpayers will sustain substantial losses if insolvency is officially declared. Indeed, recent experience in which there have been very large actual but unrecognized losses for a very wide range of depository institutions indicates that present policies work considerably less well than is suggested by official failures of depository institutions. Such a situation, in which many institutions are economically insolvent on the basis of a market-value assessment of their assets, poses the real danger of a general panic if substantial losses are imposed on depositors at individual institutions that have the bad luck to be declared officially insolvent.

Once this dangerous situation has been resolved and depository institutions have generally returned to solvency on the basis of a realistic assessment of the values of their assets, it would be desirable to increase the prospective failure rate of these institutions, conditional on their current investment policies and practices. Only by imposing effective penalties for excessive risk taking (on the owners and managers of depository institutions) will it be possible to alter these investment policies and practices. The final result may be a somewhat higher failure rate for individual institutions, even with appropriately modified investment strategies, but individual failures would occur within a safer and sounder system of regulation of depository institutions.

II. Policies for Assuring Safety and Soundness

Efforts by the federal government to assure the safety and soundness of the banking system have had a long history in the United States, dating back to the First and Second Banks of the United States before the Civil War and extending on a continuous basis since the establishment of the national banking system in 1864. Establishment of this system was motivated partly by the objective of creating a supply of safe and sound bank notes (backed by U.S. government obligations) and partly by the desire to expand the market for government debt issued to finance the Civil War. Dissatisfaction over the suspension of convertibility of bank deposits into currency during the panic of 1907 stimulated development of the Federal Reserve System in 1914, which was supposed to function as the lender of last resort. Failure of the Federal Reserve to perform this function adequately and the corresponding widespread failure of banks during the depression of the early 1930s led to enactment of federal deposit insurance for small deposits at commercial banks. Subsequent legislation increased the size of insured deposits and extended coverage to other depository institutions. Use of "purchase and assumption transactions" to deal with failing institutions (as discussed by Kareken) effectively extended deposit insurance coverage to large uninsured deposits at many institutions. Efforts to reduce such implicit coverage of large deposits by imposing losses on large depositors in failed institutions (such as Penn Square National Bank) were decisively reversed, at least for the largest commercial banks, in the bailout of all depositors and other creditors (except shareholders) of Continental Illinois National Bank and its holding company in 1984.

In addition, much government regulation of commercial banks and other depository institutions is directed at assuring their safety and soundness. This is surely the case with restrictions on bank investment in "excessively risky" loans and securities, including common stocks and most corporate bonds. It may also have been part of the objective (though not clearly the result) of restriction of savings and loan investments primarily to fixed-rate long-term mortgages. Even more important were the restrictions (now largely eliminated) on the nature and extent of competition among depository institutions, particularly with respect to interest rates paid depositors, but also concerning allowable categories of loans and investments and authorization of new institutions or new branches. Examinations of banks and other depository institutions are conducted primarily for the purpose of detecting and correcting unsafe and unsound banking practices.

Depository institutions are subject to special accounting rules that are different from the rules applied to many other types of businesses. In particular, depository institutions carry their normally performing

loans and investments at par or cost; they do not adjust the valuation of their assets to reasonable assessments of changes in market values. This is an important point that frequently receives inadequate attention. When interest rates shot up in 1973-74 and again between mid-1980 and late 1981, the market value of fixed-rate long-term mortgages held by savings and loan associations dropped dramatically. In the later case, market value must have declined by at least a third. These massive losses were not recorded on the official balance sheets or income statements of savings and loan associations. If they had been, the whole industry would have been deeply under water in 1974 and again in 1981-82 (and perhaps still in 1985). For commercial banks, the effect of this accounting rule is less dramatic because banks hold much smaller fractions of their portfolios in fixed-rate long-term instruments. There can be little doubt, however, that the deep recession of 1974-75 and the recession of 1981-82, combined with the world debt crisis of the same period, substantially reduced realistic market valuations of the loan portfolios of commercial banks relative to their official book values. In the later episode, the stock market of bank equity declined substantially relative to book value, and the stock market value of bank equity reflects not only the estimated economic value of bank assets but also the expectation of government support to prevent widespread bank failures.

Sometimes, special legislation is passed to provide assistance to depository institutions in periods of difficulty. This was clearly the case with the authorization of "all-savers certificates," which allowed depository institutions to issue special deposits with interest exempt from federal tax. It was also the case with the special rules enacted in 1981 to allow acquisition of a financially troubled thrift institution to qualify as a tax-free reorganization.

On other occasions, assistance is provided not to depository institutions directly but rather to those indebted to depository institutions. For example, one reported reason for the change in the position of the Ford administration concerning federal assistance in the New York City financial crisis was concern over the possible effects of a default on institutions holding New York City bonds and notes. United States government attempts to assist in the resolution of the world debt crisis are also probably motivated, at least in part, by concern with the effects of a major default on U.S. financial institutions.

The general commitment to safety and soundness of depository institutions that is manifested in this wide array of government policies and actions enjoys broad public support and, hence, is effectively impossible to repeal in favor of a policy of complete *laissez-faire* toward depository institutions, even if such a *laissez-faire* policy were desirable. Specific policies that implement this general commitment, of course, are appropriate targets of reforms that would increase effec-

tiveness while diminishing both direct costs and distortionary effects on the economy. Analysis of such reforms, however, should proceed on the assumption of continuing commitment of a general policy of government assurance of the safety and soundness of depository institutions.

III. Essential Requirements for Safety and Soundness

In his critique of present-day bank regulation, Kareken "take[s] 'a safe and sound banking industry' as being the objective of bank regulation" (p. 28). He questions, however, what this objective actually implies. At a minimum, he suggests that relatively poor and financially unsophisticated individuals should be afforded the opportunity of holding safe transactions balances. More broadly, the objective "could be to have no bank failures" or at least "to have no epidemic of failures and, for the largest banks, no failures" (p. 29). As a possible policy option, Kareken resurrects the old proposal of requiring institutions offering transactions accounts to hold 100% reserves of government securities against such accounts.

Concerning the meaning of the objective of safe and sound banking (defined to include other depository institutions), my views diverge somewhat from those of Kareken. I see the primary objective to be to assure the continuous and efficient functioning of the economy's transactions and payments mechanism and to prevent any crisis in the financial system from seriously impairing the overall performance of the economy. Achievement of this objective requires something more than providing safe transactions balances for small depositors and something less than preventing all bank failures or even failures of the largest banks.

The original rationale for assuring the safety of small transactions balances was only partly to protect relatively poor and financially unsophisticated individuals from losses on their transactions accounts. It was also thought that small depositors were occasionally prone to panic, thereby forcing solvent but illiquid depository institutions to fail and possibly resulting in a general run on the banking system and an acute financial crisis. While there may have been instances of such irrational panics led by small depositors prior to 1935, I suspect that the more usual situation was for runs to occur against insolvent institutions by all classes of depositors, with the relatively more sophisticated standing at the front of the line. In the general banking panic of 1907, the banking system as a whole could not meet (or chose not to meet) the demand for cash by selling assets and was forced (or chose) to suspend the convertibility of deposits into cash. It is not clear, however, that irrational fears of small depositors played an especially important role in generating this panic. In the banking crises of the early

1930s, there is little doubt that the depressed state of the economy (which was especially acute in many rural areas served by smaller banks) forced many banks into insolvency. But it is questionable that the banking crises that culminated in the Bank Holiday of March 1933 can be attributed to an irrational panic of small depositors.

Since the introduction of federal deposit insurance there has been no general banking panic in the United States, and runs against individual institutions have usually occurred when there was good reason to doubt the solvency of these institutions. This was the case in the draw-down of large deposits at the Franklin National Bank in the spring and early summer of 1974 and in the similar drawdown of large deposits at the Continental Illinois National Bank in the spring of 1984. In the case of the run against state-insured savings and loans in Ohio in 1985, it is likely that justifiable doubts about the adequacy of the state insurance fund raised realistic concerns about the safety of deposits at state-insured institutions. This experience suggests that the problem of bank runs is not limited to small depositors and that runs are not limited to irrational attacks on solvent but illiquid institutions. Indeed, in recent years, deposit insurance and other explicit and implicit government guarantees of the value of deposits have allowed many depository institutions that were probably insolvent on a market-value accounting basis to survive, prosper, and remain liquid without any serious threat of a run by depositors.

Normally, an individual's transactions balance will not exceed two or three months' income. Protection of transactions balances for financially unsophisticated individuals, therefore, can justify no more than \$10,000 or \$15,000 of deposit insurance per individual. Deposit insurance with limits of \$100,000 per account protects funds that individuals have invested in accounts at depository institutions rather than in stocks, bonds, real estate, life insurance, pension funds, consumer durables, or other assets. Protection of this particular form of investment for individuals must clearly be justified on grounds other than protecting normal transactions balances.

The principal justification for present-day deposit insurance and for a host of other policies that support and regulate depository institutions is the assurance of the continuous and efficient functioning of the transactions and payments mechanism, which is essential for the continuous and efficient functioning of the economic system. In this regard, it is vital to recognize that an individual household or business cannot adequately protect its interest in a continuously and efficiently functioning transactions and payments mechanism by holding a safe transactions balance. Holding such a balance assures the capacity to make payments only up to the limit of that balance, which, for most households and businesses, would sustain required payments for only a brief period of time. Making payments beyond the limit of one's current trans-

actions balance depends critically on receiving payments from others. Receipt of payments from others depends on the safety of their transactions balances and, most especially, on the continuous and efficient functioning of the system that transfers claims to such balances. Indeed, the critical feature of transactions balances is not that they are held (like all other assets) but rather that claims to them can be transferred rapidly and at low cost in order to carry out the huge volume of transactions associated with normal economic activity.

The volume of transactions is quite large, and the rate of turnover of transactions balances is quite high. In the United States in 1985, total debits against demand deposits will run about \$150 trillion versus a nominal gross national product (GNP) of about \$4 trillion and demand deposits of a little over \$250 billion. Thus the ratio of debits to GNP is roughly 40 to one, while the turnover rate of demand deposits is on the order of 500 per year. The ratio of transactions relative to GNP would clearly be higher if we included transactions in a broader range of claims on banks and other depository institutions (as well as transactions involving currency), but the average turnover rate of such a broader range of claims would be lower.

To sustain this high volume and rapid pace of transactions, it is essential that the costs of transacting be low and that confidence in the safety and integrity of the transactions mechanism be very high. For example, if it costs 1% of the value of the claim used to make payment in each transaction in order to verify the value of that claim, the volume of transactions would need to be dramatically reduced, unless we wanted to expend 40% or more of GNP on operation of the transactions and payments mechanism. Similarly, if transactors consistently feared a 1% chance of a 10% loss (due to bank failure) on every transaction through the banking system, it would be difficult to sustain the present payments mechanism. This small expected loss, compounded 500 times per year to take account of the turnover rate of transactions balances, amounts to more than a 50% annual rate of tax on each dollar of such balances.

In the United States and in most other countries, the transactions and payments mechanism interacts strongly with the credit system. There are two especially important dimensions of this interaction. First, the financial claims that are transferred in order to make payments are backed to a large extent by the value of credits extended by depository institutions to households and businesses. Without government deposit insurance and other explicit or implicit government assurances of the value of deposits, public confidence in the value of claims transferred to make payments (which is essential to the continuous and efficient functioning of the transactions and payments mechanism) depends on public confidence in the value loans extended by depository institutions to households and businesses. Second, most businesses

and many households require a continuing flow of credit from banks and other depository institutions in order to maintain their normal flow of payments. A sudden, unanticipated curtailment of the flow of credit from depository institutions (the gross flow rather than the net flow) would directly impair the payments abilities of businesses and households that depend on such credit and would indirectly impair the payments abilities of anyone who expects to use the receipts of these payments to make his own payments at some later time. Thus continuous and efficient functioning of the credit system is essential for continuous and efficient functioning of the transactions and payments mechanism and of the economic system that relies on this mechanism.

IV. Inadequacies of a 100% Reserve System

Theoretically, one can conceive of systems that achieve much greater separation of the transactions and payments mechanism from the credit system than presently exists in the United States and most other countries. This is the essence of the proposal to require 100% reserves against transactions balances and to limit institutions offering transactions balances and services exclusively to those businesses. Under such a system, confidence in the value of claims used to make payments would not depend on assessments of the value of loans extended by institutions offering transactions balances and services because such institutions would not offer loans or other credits. Instead, businesses and households requiring credit would have to obtain it either directly from investors in their bonds and notes or indirectly from financial intermediaries who obtain funds from the general public to be re-lent to the businesses and households requiring and deserving credit.

The history of the development of financial institutions indicates that, under a 100% reserve requirement for institutions offering transactions balances, financial intermediaries (not offering transactions balances) would play a large and essential role in the credit system, and assurance of the safety and soundness of these intermediaries would likely be a critical objective of government policy. These intermediaries (or at least some of them) would take over the key credit operations presently performed by commercial banks and other depository institutions. They would assess the credit worthiness of potential borrowers, make loans on appropriate terms to various borrowers, and monitor the performance of those to whom loans have been made. They would engage in "banking" in the classic sense that they would promise much greater liquidity to holders of their liabilities than would be characteristic of their portfolios of loans and investments. This promise would be based on the normally reasonable expectation that the net demand to convert their liabilities into some other asset (such

as transactions balances) would be small relative to their total assets. Many of these intermediaries might offer holders of some of their liabilities an option to convert these liabilities into transactions balances on demand or on very short notice, and they would retain a reserve of transactions balances to honor this commitment. If legally permitted, holders of demand-convertible claims against these intermediaries might be allowed to write checks against these claims, checks that would function as means of payment in direct competition with checks written against official transactions balances. If the government taxed official transactions balances as it presently does by requiring that a fraction of reserves be held in non-interest-bearing form and by other regulations, there would be a strong incentive for development and expansion of a payments system based on claims issued by financial intermediaries, at the expense of the system based on official transactions balances. In short, these financial intermediaries would come to perform virtually all the essential functions presently performed by commercial banks and other depository institutions. A loss of public confidence in the value of claims issued by these intermediaries would create severe problems for the functioning of the transactions and payments mechanism because it would impair the flow of credit to businesses and households requiring credit from intermediaries to sustain their payments flows. It would also impair payments by those who rely on the liquidity of their claims against financial intermediaries to make payments, either by writing checks against these claims or by converting them at short notice into transactions balances. Thus to the extent that the safety and soundness of commercial banks and other depository institutions is presently a legitimate concern of government policy, assurance of the safety and soundness of many financial intermediaries would likely be a concern of similar importance under a system in which 100% reserves are required against a certain class of specifically designated transactions balances.

V. The Rationale for Deposit Insurance

Even under the present system, in which credit operations and transactions services are provided by many of the same depository institutions, the continuous and efficient functioning of the transactions and payments mechanism (including essential and related credit activities) could probably be adequately assured without explicit government insurance of deposits. An essential requirement would probably be, however, a central bank that adequately performs the function of lender of last resort. Depository institutions as a whole cannot convert their assets (loans and securities) into cash to meet a general demand for

cash by their depositors that exceeds their limited cash reserves, especially one arising from a loss of confidence in the soundness of depository institutions. Efforts by individual institutions to acquire cash by selling assets, which cannot succeed in the aggregate, will induce a decline in the money supply (which includes transactions balances at depository institutions) and a curtailment of credit supplied by these institutions to businesses and households. If left unchecked, such a general decline in money and credit will impair the continuous and efficient functioning of the transactions and payments mechanism and will injure the overall performance of the economy. The responsibility of the lender of last resort is to forestall such a general decline in money and credit by expanding the supply of base money in order to meet a general demand to convert deposits into cash. This can be accomplished either by lending to depository institutions on the collateral of good quality loans and investments (using the discount window) or by open market purchases of assets by the central bank. Milton Friedman and Anna Schwartz argue persuasively in *Monetary History of the United States, 1867-1960* (1963) that the failure of the Federal Reserve to perform this vital function permitted the massive decline in money and credit between 1929 and 1933 that contributed importantly to the severity of the Great Depression. Countries whose central banks have more adequately performed the function of lender of last resort, in particular Great Britain, have generally been able to avoid general banking crises that result in severe contractions of the supply of money and credit. In many cases this has been accomplished without explicit government insurance of the value of deposits.

In the United States, which has thousands of depository institutions, however, it is arguable that deposit insurance is a desirable, if not an essential, supplement to a properly functioning lender of last resort. Since the introduction of federal deposit insurance, there has been no general banking crisis in the United States. This may be partly because insured depositors have little incentive to run on individual depository institutions and hence are unlikely to be stampeded into a general panic. Even uninsured depositors may be less likely to engage in runs because they perceive deposit insurance as a more general and explicit commitment of the government to support depository institutions in the event of a financial crisis. This, of course, has been the case under the deposit insurance system as it has actually developed in the United States. As Kareken points out, uninsured depositors have frequently been protected by government-arranged purchase and assumption transactions for failing depository institutions. Absence of unambiguous government guarantees for large depositors has preserved some incentive for runs against individual institutions thought in danger of failure, as illustrated by the drawdown of large deposits at Franklin

National Bank and at Continental Illinois National Bank. However, a generally perceived commitment of government support for depository institutions may well have reduced the danger of a general run by uninsured depositors and hence diminished the need for the Federal Reserve to perform its function of lender of last resort.

Deposit insurance may also be important in maintaining an equitable and efficient distribution of business among different classes and sizes of depository institutions and in limiting damage of smaller-scale financial failures that pose little threat to the nation as a whole but have potentially severe consequences within particular regions. Sometimes, smaller depository institutions fail because of fraud or extraordinary incompetence when business conditions are generally good and depository institutions generally are doing well. Failures of depository institutions, however, are most likely to occur when poor business conditions have impaired the quality of loans issued by many depository institutions. This is especially likely in the case of a possible failure by a large commercial bank. In an economic environment in which the financial condition of many depository institutions is questionable, failure of a large institution, especially a very large commercial bank, is likely to increase fears of possible failures by other depository institutions. To forestall the threat of a general panic that might be set off by failure of a large bank with substantial losses to its depositors, the regulatory authorities will be under heavy pressure to provide effective assistance and seek a speedy resolution of the potential crisis. The pressure to provide assistance in the case of prospective failure of a smaller depository institution is much less because such a failure does not usually pose a serious threat to the financial system as a whole. Because depositors and credit customers of depository institutions recognize that large institutions are more likely to receive government assistance in the event of difficulties than are smaller institutions, they have an artificial incentive to do business with larger institutions. This not only gives an unfair advantage to larger institutions in their competition with smaller institutions but also distorts the allocation of resources in the provisions of services by depository institutions. Further, failure of a smaller depository institution can have serious adverse consequences for its customers even if it poses no threat to the economy at large. In areas of the country that are served primarily by a few smaller institutions, failure of one or more of these institutions may have adverse consequences for the economy of that area, again without having any important effect on the nation's economy. Deposit insurance and related government policies provide some assurance that government assistance to troubled depository institutions will not be restricted primarily to the largest institutions and that smaller scale financial crises with important but local adverse effects will receive some attention.

VI. Failures of Depository Institutions

It should be emphasized that maintenance of a properly functioning transactions and payments mechanism (including essential elements of the credit system) does not require an exceptionally low failure rate for depository institutions or an absence of failures of large banks. Further, the success of government policies toward depository institutions should not be judged, as Kareken appears to suggest, by the failure rate of such institutions. Rather, the objective of government policy should be to prevent failures of depository institutions from disrupting the transactions and payments mechanism and to do so at low direct and indirect cost to the taxpayer. When a depository institution fails, the managers responsible for its operation should lose their jobs, and the stockholders and subordinated creditors of the institution should absorb the financial losses associated with its failure, just as the managers, stockholders, and subordinated creditors of other types of failing enterprises should expect to suffer losses. The customers of the essential services provided by depository institutions, in contrast, should be protected from significant loss or serious inconvenience. The principle here is really no different from the principle applied in the event of failures of other types of firms providing essential public services. Financial failure of a railroad, an electric utility, or a telephone company would not be allowed to disrupt the essential services provided by these companies. In the bankruptcy of Penn Central, for example, railroad services were not suspended for 5 years while the courts settled the competing claims of different creditors of the corporation. Telephone or electric service would clearly not be suspended while the courts arbitrated financial claims against bankrupt firms providing these essential services.

Extension of such treatment to failing depository institutions involves special difficulties because issuance and transfer of financial claims is at the heart of the essential services provided by such institutions. To assure continuation of essential services in the event of a financial failure, it is necessary to distinguish sharply between the customers of an institution, whose interest in uninterrupted service is to be protected, and owners and other subordinated creditors, who must absorb losses and await the outcome of the bankruptcy process to determine the value of their claims. If the government acts promptly to deal with insolvent depository institutions, the interest of customers can probably be protected at little cost to the taxpayer. Prompt action means that the losses sustained by the institution before its reorganization should not exceed the losses that can be passed on to the stockholders and other subordinated creditors of the institution.

The issue of who should absorb losses in connection with failure of a depository institution is related to the issue of who should monitor the

institution for the purpose of determining its solvency. Depositors who are classed among those who must absorb losses will have an incentive to monitor the institution and will attempt to withdraw their deposits when they suspect insolvency. The common occurrence in the event of failure of a depository institution will be for its failure to be forced by a run of its unprotected depositors. This is essentially what happens in the failure of many businesses—the short-term creditors refuse to extend new credits and attempt to collect existing credit in order to avoid losses, and the business is forced into bankruptcy by its incapacity to obtain credit required to pay off its maturing obligations.

Such a run by uninsured depositors and other short-term creditors of a depository institution thought to be in danger of failure need not have disastrous consequences for the transactions and payments mechanism or for the economy, provided that it does not spread in a panic that forces closure of many otherwise solvent institutions. Presumably, an appropriately functioning lender of last resort could and should prevent a run against a failing institution from spreading into a general panic. However, probably because of the experience of the early 1930s, government policy in the United States has generally sought to avoid runs against failing depository institutions. If this is to be an objective of government policy (for good or bad reasons), it must be recognized that uninsured depositors cannot be expected to shoulder significant losses in the event of failures of depository institutions and cannot be delegated the primary responsibility for monitoring the solvency of these institutions. The alternative is for the government regulatory agencies to undertake the primary responsibility for monitoring the solvency of depository institutions and to protect even uninsured depositors from substantial losses. This should be possible without exposing taxpayers to substantial losses, provided that depository institutions are required to maintain capital resources (equity, accumulated surplus, loan-loss reserves, and subordinated debt) adequate to cover the risks associated with their asset portfolios and provided that the regulatory authorities intervene promptly to require reorganization and recapitalization of institutions whose capital falls below prescribed levels. This implies that, in many instances, reorganization and recapitalization may be required before institutions actually become insolvent. With prompt action by the regulatory authorities under such a system, there should be few instances where failures of depository institutions result in significant losses that must be absorbed by uninsured depositors or taxpayers.

VII. Deficiencies of Present Policies

Unfortunately, government policies have tended to discourage adequate holdings of capital by depository institutions, and regulators

have not always been very prompt in requiring reorganizations even of insolvent institutions. Explicit deposit insurance (without risk-adjusted insurance charges) and other implicit government assurances provided to deposit holders have created a situation in which part of a marginal increment in the risk of the asset portfolio of a depository institution is passed on to the government rather than being borne by the institution's depositors, equity holders, or subordinated creditors. In this situation, there is an incentive for the managers of a depository institution to increase somewhat the riskiness of their asset portfolio in order to earn a higher spread between the expected return of assets and the cost of funds acquired from depositors. If a single institution were the unique beneficiary of government assurances of the value of deposits, the effect on increased risk taking would probably be quite small. This institution would earn a higher spread without any increase in the riskiness of its assets because the government assurances of the value of its deposits would reduce the cost of deposits for this institution relative to the cost at other institutions. In this case, the equity owners of the institution would capture much of the benefit of the government assurances of the value of its deposits. When government assurances extend to deposits at a wide range of highly competitive institutions, little of the benefit of these assurances is captured by equity holders in these institutions, and the effect on risk taking is enhanced. Competition among institutions for loans and deposits forces down the spread to the point at which equity holders expect to earn the normal rate of return for the risk to which they are exposed. With low spreads between loan rates and deposit costs, managers of depository institutions are forced to maintain low ratios of equity to total assets in order to earn returns sufficient to attract equity capital. Thus the effect of deposit insurance (without risk adjusted insurance charges) and other implicit assurances of the value of deposits is to diminish the cushion of equity capital that protects either the government or uninsured depositors in the event of declines in the values of assets held by a financial institution.

This effect is reflected in the behavior of the ratio of bank equity to bank assets relative to the riskiness of bank assets. In 1945, when bank portfolios were dominated by U.S. government securities and interest rates were controlled and very stable, the ratio of equity capital to assets (call date data) was 5.5% for all insured banks and 6.4% for large New York City banks. By 1960, these ratios had risen to 8.1% and 8.9%, respectively, but there had surely been a greater relative increase in the riskiness of bank assets due to the large increase in the portfolio share of commercial loans and to the increase in interest rate volatility. After 1960, capital ratios declined for all insured banks and for large New York City banks, reaching 7.1% and 7.5%, respectively, in 1978. These declines occurred despite further increases in the port-

folios shares of commercial loans and in the volatility of interest rates. Moreover, if account is taken of assets and deposits of foreign branches, which became important after 1960 for large banks, then the equity capital ratio for large banks in the late 1970s and early 1980s would be only about 4% versus equity capital ratios of about 7% for smaller and medium-sized banks. It is arguable that this relative decline in the capital ratios for large banks is at least partly attributable to growing confidence that the government would protect uninsured depositors in large banks but not necessarily in smaller banks, as was the case for uninsured depositors at Franklin National Bank and Continental Illinois National Bank but not for such depositors at some smaller banks like Penn Square National Bank.

Another development that is consistent with the hypothesis that government assurances of the value of deposits have encouraged risk taking by depository institutions is the growth of international banking and the dominance of large commercial banks in international credit markets. In earlier periods, direct purchases of foreign bonds by individual investors played an important role in private international capital movements. British investors, for example, helped finance railroad construction in the United States, Argentina, and tsarist Russia. More recently, especially since the recycling of the surpluses of the oil exporting countries began in 1974, large commercial banks in the United States and other industrial countries have dominated international credit markets, especially with respect to lending to middle-income developing countries. One reason for the emergence of large banks as dominant players in this market is the perception on the part of the ultimate suppliers of credit (who hold the deposits of large commercial banks, including their Eurodollar deposits) that the governments of the United States and other industrial countries will not permit failures of these banks. This assurance is not absolute, but it is generally expected that governments of the industrial countries will provide assistance and apply pressure to avoid defaults by developing countries on their bank loans and would, if necessary, assist banks directly in order to avoid collapse of the international banking system. The perception of such assurances has not allowed the large banks engaged in international lending to make enormous profits. Rather, competition among the 40 or 50 big banks that dominate this market has driven down the spreads between the rates earned on international loans and the cost of funds in the Eurodollar market. Perceived assurances of government support have operated like a subsidy on the output of a competitive industry. The output of the industry (credit intermediated by large banks) has been expanded, but individual firms have not become more profitable.

The reluctance of regulatory authorities to close insolvent depository institutions is most dramatically illustrated in the case of savings and loan associations. Eighty to ninety percent of the portfolios of

these institutions was invested in fixed-rate long-term mortgages until very recently. When long-term interest rates shot up in late 1979 and early 1980 and then surged to even higher levels in 1981 and early 1982, the market value of fixed-rate long-term mortgages plummeted by 30% or 40%. This fact was not registered on the balance sheets and income statements of savings and loan associations because assets are carried at book values (unless they are in default) rather than at current market values. On a market-values basis, however, savings and loan associations must have lost about \$150 billion between mid-1979 and mid-1982 and must have had negative net equity in mid-1982 of approximately –\$100 billion on a market-value accounting basis. Despite insolvency on a truly monumental scale, relatively few savings and loan associations officially failed in 1981 and 1982 (though more did fail later and are still failing because of what happened in 1981 and 1982). The legal requirement of book-value accounting, of course, limited the ability of regulators to declare the insolvencies that had actually occurred. There was, however, no strong push to change the law at that time in order to allow closer correspondence between reported financial results and economic reality. Indeed, accounting rules were jiggled further in the direction of keeping economically insolvent institutions officially solvent. In addition, Congress authorized issuance of all-savers certificates in an effort to provide assistance to troubled depository institutions at considerable cost to the U.S. Treasury.

The solvency problems of commercial banks in 1981 and 1982 were clearly less severe than those of savings and loan associations. Commercial banks hold much smaller fractions of their portfolios in longer-term fixed-interest instruments, primarily, municipal bonds and some mortgages and longer-term Treasury bonds and notes. Nevertheless, the upsurge in interest rates probably reduced the market value of longer-term fixed-rate instruments held by commercial banks by as much as 2% or 3% of total assets. (For example, a 20% decline in the market value of 10% of a bank's assets amounts to a 2% decline in the value of total assets of that bank.) Commercial loans, which are generally provided on a floating rate basis, were not subject to similar declines in implicit market value. However, it is likely that the default risk on many commercial loans did rise as the economy fell into deep recession, and this was not appropriately reflected in a writing down of the value of such loans on the books of commercial banks. Later on, in 1984 and 1985, many banks increased their provisions for bad loans at the expense of reductions in their reported earnings. Surely the need for such loan loss provisions could not have been greater after 2 or 3 years of fairly vigorous recovery than it was at the depths of the recession. In addition, in 1981 and 1982, the world debt crisis reached its peak. Fears were expressed about the possibility of default by the two largest debtor countries, Brazil and Mexico, as well as by a number of

smaller countries. Little good evidence exists on which to establish reliable estimates of the implicit market values of bank loans to developing countries, but a 10% reduction in the value of these loans below book is probably not excessive for the period from mid-1981 to mid-1982. This implies approximately a \$25 billion loss of implicit market value of assets for the banks making these loans, with a heavy concentration of such losses in the largest banks. All together, it is not unlikely that official capital of the banking system on a book-value basis (about 7% of total assets) would have been wiped out in 1981–82 on a market-value accounting basis. For the largest banks, which had lower official capital ratios (about 4% of total assets), the likelihood of insolvency on a market-value basis is even greater.

VIII. Lessons from Recent Experience

Given the situation that existed in 1981–82 (and that still exists to some extent in 1985), it would have been disastrous to move suddenly to a market-value accounting system for depository institutions and to impose large losses on uninsured depositors (or even equity holders) of insolvent institutions. The result would have been a financial crisis that probably would have surpassed the magnitude of the Bank Holiday of March 1933. In the circumstances, the appropriate policy was to wait for and attempt to stimulate an improvement in general economic conditions and a lowering of interest rates that would improve the true financial condition of depository institutions. It now is important that we should learn from this experience some relevant lessons concerning policies designed to assure the safety and soundness of depository institutions.

First, the present system works less well than is suggested by the record of failure of depository institutions and the losses sustained in these failures. In 1981–82, there were actual but unrecognized losses for depository institutions on the order of \$100–\$200 billion. These losses were unrecognized because they were covered by an implicit liability of the government (and hence the taxpayer) to insured and uninsured depositors at these institutions. Aside from this implicit financial loss, there was some serious danger of a collapse of the financial system that would have had disastrous consequences for the economy. If the recession had been deeper and longer, if interest rates had risen and remained higher, if there had been a default by a major debtor country, official failures of depository institutions would probably have been more widespread.

When a depository institution fails, it is difficult to conceal its actual but unrecognized losses; these losses must be recognized and absorbed by someone. If the government absorbs all the losses and makes clear a policy of absorbing losses in the event of other failures, depositors and

other creditors of this and other institutions would be happy, but taxpayers and their Congressional representatives might object. If significant losses are absorbed by uninsured depositors and other creditors of the failed institution, or if the government suggests that such losses may be imposed in the event of future failures, then uninsured depositors and other creditors of many other institutions will rush to withdraw their funds. The result will be a panic, but not an irrational panic. The danger of such a panic is enhanced precisely because it is the realistic and reasonable response to the actual economic situation. The fact that we avoided such a panic in 1981–82 (and perhaps also in 1974–75) should not lead to overconfidence that equally fortunate outcomes would be obtained if we replayed the game a dozen times.

Second, under the present system, which allows depository institutions to survive even when they are insolvent (and sometimes massively insolvent), it is not appropriate to rely on depositors to monitor the performance of these institutions and discipline their risk taking. Insured depositors need not be concerned with risk taking or with the solvency of the institution holding their deposits. Uninsured depositors in actually or potentially insolvent institutions are clearly concerned with something more than the economic value of the assets and liabilities of the institution and with their economic riskiness. Since these depositors suffer no loss unless an institution fails officially (and not even for sure in that event), they are concerned with the likelihood that government support will be provided or continued in the event of insolvency. While it may be desirable to expose uninsured depositors to possible losses in order to induce them to impose discipline on risk taking by depository institutions, it is far from clear that a socially useful purpose is served by inducing such depositors to place bets on the likelihood of continued government support in the event of actual but undeclared insolvencies.

If uninsured depositors expect to suffer some loss in the event of an official failure but recognize that the government is unlikely to allow widespread official failures within broad classes of institutions, then these depositors will be concerned with the relative riskiness of the institution holding their deposits in comparison with other similar institutions. Such concern presumably exercises some discipline on relative risk taking by individual depository institutions but not necessarily much discipline on the average level of risk taking by broad classes of institutions. This principle operates, for example, for the class of savings and loan associations or the class of large commercial banks. Investing funds acquired from short-term deposits in fixed-rate long-term mortgages is a risky business and was a risky business even before 1979. Since all savings and loan associations were in this business in a big way, however, depositors at particular institutions did not have to worry very much about the fundamental riskiness of the activ-

ity, given that they believed that the government would not permit wholesale liquidation of the savings and loan industry. Similarly, since most big commercial banks have lent extensively to developing countries in recent years, and since the government is unlikely to tolerate widespread failure of big banks with extensive losses to their depositors, uninsured depositors at these banks need be concerned with foreign loan exposure primarily to the extent that one big bank is out of step with other big banks.

Third, to improve the safety and soundness of our system of depository institutions and of the transactions and payments mechanism that relies on this system it is essential to increase the risk of failure of individual institutions for any given investment strategy and capital structure of such institutions. The desirable policy would be to ensure that any losses on the loans and investments made by these institutions are promptly and completely absorbed by their equity owners and subordinated creditors. (This policy should be implemented only at a time when most depository institutions have returned to solvency on a market-value accounting basis.) With the investment strategies and capital structures now characteristic of depository institutions, this policy would imply a very high failure rate, especially for savings and loan associations that finance fixed-rate long-term mortgages with short-term interest-sensitive deposits.

The point here, however, is that this policy would induce alteration of investment strategies and capital structures. Savings and loan associations would still originate and service fixed-rate long-term mortgages to be resold to individual investors, pension funds, insurance companies, and other appropriate asset holders, but they would hold such mortgages in their own portfolios only to the extent that they could fund them with long-term deposits. Capital ratios of commercial banks would probably rise, and the spread between rates charged on bank loans and rates paid to bank depositors would probably increase. The extent of intermediation activities carried out by banks and other depository institutions would diminish as the implicit subsidy to such intermediation is diminished. To a greater extent, credit would flow directly from the ultimate lenders to ultimate borrowers. The capital structure of firms might be altered in the direction of greater equity and long-term debt and less short-term credit from depository institutions. Many of these changes would tend to reduce the failure rate for depository institutions, but not necessarily below the official failure rate under the present system. The objective that would be achieved, however, would be a failure rate for such institutions that reflects the risks to which they are exposed, within the context of a financial system in which failure of individual depository institutions does not threaten the continuous and efficient functioning of the transactions and payments mechanism.

Finally, under the present system or under any new system of regulation of depository institutions, it is important to recognize that the safety and soundness of these institutions depends critically on the stability of the economy that they serve. During the past 20 years, we have moved through a period of gradually but persistently accelerating inflation, punctuated by major recessions, into a period of quite rapid disinflation. Financial market conditions, as indicated by the behavior of interest rates, have become far more unstable than at earlier times in the postwar period. This instability in the economy and the financial markets would probably have put considerable strain on depository institutions under any conceivable system of regulation. Key requirements for improved safety and soundness of depository institutions include a lower and less variable inflation rate, more stable interest rates, and less violent fluctuations in economic activity.

References

- Kareken, John H. In this issue. Federal bank regulatory policy: A description and some observations.
- Friedman, Milton, and Schwartz, Anna. 1963. *Monetary History of the United States, 1867-1960*. New York: National Bureau of Economic Research.

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