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Bank Intermediation, Bank Runs, and Deposit Insurance by Arthur J. Murton

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

Should the \$100,000 Deposit Insurance Limit Be Changed?

by Frederick S. Carns

In considering how to harness market forces to better control bank risk-taking, it often is recommended to alter the \$100,000 statutory limit on deposit insurance coverage. The most common suggestion is to reduce the scope of coverage—and thus promote "depositor discipline"—either by lowering the dollar amount of coverage per deposit or restricting coverage to particular deposit classes. Occasionally, however, it also is suggested that deposit coverage be expanded in order to facilitate methods of failure resolution that may elicit stronger discipline from nondeposit creditors. This article considers the merits of proposals to enhance market discipline through changes in the statutory limit on deposit insurance coverage.

Forbearance: Practices and Proposed Standards

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by Dean Forrester Cobos

Forbearance is a word with different meanings to different people. Because in recent years forbearance often has been associated with the delayed closure of insolvent institutions, it has become a dirty word in many places. However, there are many forms of forbearance that have long been accepted supervisory practices. Forbearance is not something to be avoided under all circumstances. This article discusses appropriate uses of supervisory forbearance.

Recent Developments Affecting Depository Institutions by Benjamin B. Christopher

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Bank Intermediation, Bank Runs, and Deposit Insurance

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Banking and the Cost of Bank Runs

Deposit insurance is a form of government intervention into the marketplace. Government provision of deposit insurance is predicated on the existence of social benefits associated with insurance of bank deposits. The major social benefit that deposit insurance is intended to provide is the prevention of widespread bank deposit runs and the damage that they cause.^{1,2} In order to justify deposit insurance, it is necessary to specify why and how bank runs impose social costs. Much attention has been focused, particularly through the efforts of Friedman and Schwartz (1963), on the damage to the money-supply process caused by bank runs. This channel requires a systemic run to currency and a failure of the monetary authority to offset the collapse of the money multiplier. Bernanke (1983), while in no way dismissing the importance of the monetary channel, argues that bank runs impose an additional cost, the loss of credit intermediation.

The argument for deposit insurance put forth here follows Bernanke by focusing on the creditallocation role of banks. Bank runs are costly, it is argued, in part because runs can disrupt or destroy an important conduit of investment funds in the economy. This argument therefore focuses on the role of banks as intermediaries in the economy.

Bernanke's framework was built on two foundations. The first is the seminal article by Diamond and Dybvig (1983). Banks are a special class of intermediaries, distinguished primarily by their funding of illiquid assets with liquid liabilities. This feature is critical to both the productive role of banks and their susceptibility to damaging bank runs. The second foundation is the literature that focuses on banks as a mechanism to overcome information problems associated with certain assets.

For purposes of this discussion, "bank" will refer to a stylized entity which issues liabilities that are redeemable at par either on demand or after some short maturity and holds assets that are illiquid because banks have private information about the quality of the assets. The first part of the discussion will focus on an important and controversial question: namely, whether there is essential interaction between the liability and asset sides of the bank, or conversely, whether it is innocuous, in theory and in practice, to separate the two sides of the balance sheet. The second part of the discussion focuses on the characteristics of bank assets.

² Government action is often triggered by the desire to help a particular group that is perceived to be disadvantaged in some way. In the case of deposit insurance, the argument is that there are people who are relatively unsophisticated financially who should have easy access to a safe means for both making payments and for storing wealth. (See Gorton and Pennacchi (1988).) If this were the sole reason for government intervention, it would seem that the current system represents a sledgehammer approach, and that either lower deposit insurance coverage or a more limited alternative form of protection would be appropriate.

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

The Unique Intermediary Role of Banks: What Is the Sound of One Hand Clapping?

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

Diamond and Dybyig have argued that the special role of banks derives from the social-welfare enhancement that can be realized when banks coordinate the funding of these illiquid assets with highly liquid liabilities. Banks issue deposits that satisfy depositors' liquidity needs. By pooling liquidity risk across individuals, the bank will need to hold fewer liquid assets than the depositors would hold if they lacked access to the bank. To the extent that the bank can meet the liquidity needs with fewer liquid (and less productive) assets, there are more funds available to support productive illiquid investment.3

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

The main functions of banks can be described in terms of the balance sheet items described above. Asset services are provided to the "issuers" of bank assets (the borrowers); these services include evaluating, granting and monitoring loans. Liability services are provided to the "holders" of bank liabilities (the depositors); these services include holding deposits, clearing transactions, maintaining an inventory of currency, and service flows arising from conventions that certain liabilities are acceptable as payments for goods. Transformation services require no explicit service provision to borrowers or depositors but instead involve providing the depositors with a pattern of returns that is different from (and preferable to) what depositors could obtain by holding the assets directly and trading them in a competitive exchange market. Explicitly, this means the conversion of illiquid loans into liquid deposits, or more generally, the creation of liquidity.⁴

The liquidity transformation that enables banks to provide useful services is also the source of banks' susceptibility to destructive deposit runs.

What is meant by destructive bank runs? Bank runs are caused by a combination of two factors. As discussed above, loans, the primary asset of banks, are illiquid in that they can not be sold quickly without a loss in value. The second factor that causes bank runs is the ability of most depositors to withdraw their deposits either on demand or on short notice. These two factors virtually guarantee that a bank will be unable at any time to fulfill its potential obligation to convert all or most of its liabilities to cash. Of course, under normal circumstances the bank will never be called upon to fulfill *all* of its obligations; this is what allows the bank to invest in illiquid assets.

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

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

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

The Special Nature of Bank Loans

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

Put differently, banks specialize in lending to a unique class of bor-

³ Note that the illiquidity of the assets is essential for the argument: if all productive assets were liquid, people could provide their own liquidity without the need for the bank. ⁴ Diamond and Dybvig (1986), pp. 57-58. rowers. For these borrowers, "public information on the economic condition and prospects of such borrowers is so limited and expensive that the alternative of issuing marketable securities is either nonexistent or unattractive."5 Because these borrowers cannot easily convey information about their own creditworthiness to lenders (or conversely, because lenders cannot easily ascertain the creditworthiness), there are agency costs associated with the borrowing and lending arrangements available to them. Banks alleviate these costs by specializing in evaluating and monitoring this class of borrowers.6 In essence, banks' information-gathering and monitoring expertise of this class of borrowers allows them to find profitable investment opportunities in essentially nonmarketable assets.

Once the loans have been made, the agency problem now extends to any potential sale of the assets by the bank. This results in illiquidity because the value of the project is known only to the monitor (the bank); a prospective buyer must incur costs to evaluate the project and these costs will result in a lower value. The important implication is that there are liquidation costs associated with these assets. Social welfare is enhanced if these loans are allowed to mature.

The Cost of Bank Runs

As stated earlier, the fact that illiquid bank assets are funded with more liquid liabilities redeemable at par means that banks are susceptible to runs. The belief that a panic run will occur is self-fulfilling.

When runs occur, they may force "fire-sale" liquidations of bank assets that impose social costs. Again, these costs arise because most bank assets (loans) are inherently difficult to value and, hence, are ill-suited to trading in spot markets. Bankers possess specialized information about the nature of their assets that cannot be quickly or easily transferred. This makes spot trading pro-

hibitively costly for the establishment of a broad secondary market, with the result that forced liquidations typically yield asset prices that are below "equilibrium" values.7 In the process, creditworthy borrowers lose financing (often for extended periods, given the information costs noted), production is interrupted, and consumption plans are frustrated. Runs can be socially costly because they force a market valuation of assets that are not ordinarily valued in markets. The assets are not traded voluntarily precisely because their characteristics make markets inefficient devices for valuing them. The results are understandably costly when the banking organization is recognized as (in part) a device for avoiding the excessive costs of market organization (for trading such assets) in the first place.8

The informational problems associated with bank assets effectively mean that there is a discontinuity in bank asset values when moving from states of the world in which assets are allowed to mature to states in which assets are liquidated. This difference between "going-concern" value and liquidation value is a critical element in explaining why bank runs occur and why they are costly.⁹

To summarize, bank runs are costly because runs adversely affect the financial intermediation performed by banks. Economic activity is adversely affected when loans are liquidated prematurely in order to meet depositors' claims. More importantly, if bank runs are widespread there may be a general contraction of these special intermediary services.¹⁰ Borrowers who may otherwise receive bank loans in a more favorable environment may not be funded as banks are forced to maintain high levels of liquid assets.

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

these factors, plus the actual failures, forced a contraction of the banking system's role in the intermediation of credit. Some of the slack was taken up by the growing importance of alternative channels of credit.... However, the rapid switch away from the banks (given the banks' accumulated expertise, information, and customer relationships) no doubt impaired financial efficiency and raised the cost of credit intermediation.¹¹

Diamond and Dybvig did not need to model the conditions under which bank runs will occur in order to make their point that the inferior

⁶ See Bernanke and Gertler (1988); Bernanke (1983); Diamond (1984) and (1988); and Boyd and Prescott (1986).

⁷ "Equilibrium" value as used here refers to the price obtainable given the normal amount of time for the necessary information-gathering by prospective buyers (see Kaufman (1988)).

⁸ Coase (1937) characterizes the firm as a device for avoiding the excessive transactions costs associated with spot-market trading. This notion is widely recognized as essential to the explanation of banking's original development in free markets. See Woodward (1988), Bernanke (1983), Goodhart (1987), and the literature cited therein. As noted in the following text, this notion is necessary but not sufficient to describe what may be unique about banks. I thank Fred Carns for this point.

⁹ The discontinuity issue surfaces in a world with deposit insurance when considering both bank-closure rules and methods used to resolve failed banks. *See* Bovenzi and Murton (1988) and James (1988).

¹⁰ Even if runs are not widespread, bank runs can disrupt the communities in which they occur. This local externalities problem also has been offered as a reason for providing deposit insurance.

¹¹ Bernanke (1983), p. 264.

⁵ Goodhart (1987), p.86. Fama (1985) and James (1987) take this one step further by arguing that banks' interaction with their customers as both depositors and borrowers enhances their ability to monitor the repeattype, short-term loans that banks offer. Knowledge of a customer's history as a depositor allows the bank to evaluate the credit risk of the same customer more cheaply than other lenders. Thus, there may be a synergy between deposit-taking and the special types of loans that banks offer.

bank run equilibrium is a consequence of the liquidity transformation performed by banks. For example, the Diamond-Dybvig model can be modified by introducing a random-selection mechanism that determines whether a run occurs and then focusing on the initial investment decision of households. One of the simple results is that, in the face of the threat of bank runs, depositors will require banks to hold more liquid assets than if bank runs were not a threat. This means, as Bernanke describes above, that banks will provide less funding of the type of investment in which banks specialize. The greater the likelihood of a panic run, the less investment will be undertaken by the special class of borrowers to which banks cater. Ex ante, in a world without deposit insurance, the threat of runs reduces productive investment.

The primary purpose of deposit insurance is to promote financial stability by preventing destructive bank deposit runs. Deposit insurance is designed to reduce the possibility of runs and to thereby avoid the damage that runs cause and to facilitate the funding of the lending that is characteristic of banks. Deposit insurance works by directly guaranteeing depositors that they will not suffer losses, thus removing the incentive to participate in a bank run. In order for deposit insurance to be effective, the guarantee must be credible.

Distortions Created by Deposit Insurance

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

Deposit Insurance Removes Depositor Discipline

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

In any financial transaction the borrower must compensate the lender for risk that is borne by the lender. A borrower whose repayment is more uncertain must provide a higher expected return to the lender. In the case of banking, the repayment depends on the return on the portfolio held by the bank and by the level of bank capital that serves as a cushion to absorb losses. In the absence of deposit insurance, a bank that wished to hold a riskier portfolio of assets or a smaller amount of capital would have to offer a higher expected return to depositors.12

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

Incentives for Excessive Risk-Taking

With deposit insurance the FDIC bears the risk of any loss. The FDIC's

position is therefore similar to that of an uninsured depositor's in that the FDIC bears the risk of loss arising from a bank's investment decisions. However, unlike other creditors, the FDIC cannot vary the premium it charges for insurance on the basis of risk.¹³ This flat-rate insurance pricing structure, it is argued, creates an incentive for excessive risk-taking.

The following simple example presents the argument more directly.14 Suppose a bank is funded with \$90 of deposits. The bank has a choice between two asset portfolios. The "safe" portfolio will return \$100 with certainty. The "risky" portfolio will pay \$80 half the time ("bust") and will pay \$120 the other half ("boom"). Notice both portfolios have the same expected value. The value of the bank if it chooses the safe portfolio is $$10^{15}$. The value of the bank to the shareholders if it chooses the risky portfolio is: 1) zero if the portfolio busts or 2) equal to \$30¹⁶ if the portfolio is successful. The expected value of the bank is \$1517. Therefore, if the banker wants to maximize the expected return to shareholders, he or she should select the risky portfolio.

Obviously, what drives the example is that the insurer bears the cost when the portfolio busts. Consider the cost of providing the insurance. If the bank chooses the safe portfolio, there is no cost because the bank cannot fail. If the bank chooses the

¹³ Note that the risk premium the insurer would charge would not need to include the component associated with the risk of runs (as discussed in the previous footnote) because deposit insurance has eliminated that risk. That component can be viewed as the measure of the social benefit of a mechanism that eliminates bank runs. There are, of course, costs associated with such mechanisms.

¹⁴ This is similar to an example given by Flannery (1982).

- $^{15} = \$100 \$90.$
- $^{16} = \$120 \$90.$
- $17 = \frac{1}{2} \times \$0 + \frac{1}{2} \times \$30.$

¹² The risk premium required by depositors could be decomposed into two components: one compensating for the "normal" risk, *i.e.*, credit, interest-rate, and operating risk, and one compensating for the risk of losses resulting from being last in line in a bank run.

risky portfolio, the cost is: 1) \$10 if the portfolio busts¹⁸ and 2) zero if the portfolio booms; this gives an expected cost of \$5¹⁹. By allowing the bank to freely choose the portfolio, the insurer has, directly at its own expense, increased the bank's expected value from \$10 to \$15.

Controlling Bank Risk-Taking: The Present System

In the context of the example presented above the insurer can do several things to protect itself. First, it can prevent the bank from choosing the risky portfolio (supervision and regulation); it can charge the bank \$5 if the bank chooses the risky portfolio (risk-based deposit insurance); or it can require the shareholders to replace \$10 of deposits with equity, which would eliminate the insurer's cost even in a bust (capital requirements).²⁰

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

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

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

In addition to regulation, capital requirements, and the discipline uninsured depositors and creditors provide, whether banks have the incentive to undertake excessive risks will depend on several other factors, including: risk aversion on the part of bank owners, the presence of significant bankruptcy costs and the costs imposed on bank managers associated with a bank's failure. If bank owners are risk averse, they may not be willing to accept higher risk for higher return. This may not be relevant for banks with widely held stock because the shareholders can diversify their portfolio. However, for institutions where the owners may have sizable portions of their wealth invested in the bank, risk aversion may be a reasonable assumption. As for larger banks, they are typically owned by holding companies which are funded with both equity and debt. Debt holders will have the incentive to police the riskiness of the holding company asset, *i.e.*, the bank.

If there are significant bankruptcy costs associated with bank failures, then the bank may choose a safer portfolio in order to avoid them. A potential bankruptcy cost is the loss of the bank charter, assuming that a charter enables one to earn supranormal profits.²¹

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

Alternatives to Deposit Insurance

Deposit insurance is not the only means available to safeguard the financial system from bank runs. How one evaluates these alternatives depends on what role banks are assumed to play in the economy and the costs associated with bank failures.

Suspension of Convertibility

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

Lender of Last Resort

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

In terms of protecting the money supply, an effective lender of last resort is capable of offsetting any contraction of the money supply caused by bank runs by the injection of reserves, either through purchase of securities or loans to banks. This requires the lender of last resort to be able to measure the contractionary effect of the runs and to gauge the amount of reserves necessary to inflate the money supply to the appropriate level. Both of these require determining the extent to which the runs represent a flight to currency. Protection of the money supply does not have to involve pro-

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

²¹ Marcus (1984); and Buser, Chen and Kane (1981).

¹⁸ The payment to depositors net of the value of the assets.

 $^{^{19} = \}frac{1}{2} \times \$0 + \frac{1}{2} \times \$10.$

tecting individual banks; it merely requires the replenishment of systemwide reserves.

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

At this point, let us define what we mean by lender of last resort and deposit insurer so as to make clear the distinction between them. A deposit insurer provides a guarantee on certain deposits that is noncontingent; a lender of last resort will fund the withdrawals from solvent institutions only.²² When a run occurs, the lender of last resort must make a judgement regarding the solvency of the bank experiencing the run.

If bank assets are difficult for outsiders to value, then depositors will have difficulty determining whether or not they should participate in the run. Presumably, they would err on the side of safety, and participate in the run even if their best estimate was that the bank was solvent. Runs would occur on solvent institutions, and thus the lender of last resort would not be expected to be as effective in preventing this type of financial instability as would a deposit insurer.

Another drawback arises from the conflict between protecting the financial system and avoiding inflationary growth of the money supply. To be effective, the lender of last resort must provide a credible commitment to freely fund withdrawals from solvent banks. Providing this commitment requires relinquishing control over the creation of reserves and, thus, the money supply.²³

Narrow Banks

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

One problem with these proposals is feasibility. Currently, the checkable account portion of the money supply is over \$550 billion. There are \$381 billion in short-term Treasury bills outstanding. Given this shortfall, either commercial paper or long-term Treasury instruments would need to be included as eligible reserves. Once the range of eligible investments is broadened, the resulting risk poses a threat to a safe payments system, thereby defeating one of the major purposes for the narrow bank.²⁴

Putting aside the question of feasibility, the problem remains that enhancing the payments system is not the only potential role for banks in the economy. Banks facilitate intermediation between savers who desire liquidity and borrowers who lack direct access to credit markets. Also, there may be important synergy between the deposit-taking and lending function of banks.25 If these are important aspects of the economic role that banks play, then the imposition of a narrow-bank financial structure will have one of two undesirable results.

The first occurs if firms are suc-

cessful in circumventing the imposed structure. The narrow-bank structure severely restricts the type of assets that can be held by firms issuing "runnable" liabilities. If there are profits to be earned from circumventing this restriction, then firms will act accordingly. If they are successful, there will be a class of firms that is susceptible to runs and presumably poses a threat to financial stability.²⁶

The second case occurs if firms desire to, but are not successful in, circumventing the restrictions. The flow of savings to a desirable form of financial intermediation will have been diminished. Borrowers for whom it is costly to tap the credit markets directly will have access to less funding. If, as Diamond (1988) suggests, these borrowers represent young, profitable enterprises which have not yet established a favorable reputation, then the narrow-bank structure may place a severe drag on future growth. Further, whatever synergies exist between deposittaking and lending will not be realized.27

²² If the lender of last resort agrees to fund withdrawals from all institutions, then it bears the loss when an insolvent bank is closed (just as the FDIC does now). Presumably, it would charge banks for this risk-bearing, and would require examination and supervisory powers similar to those currently held by the FDIC. It would at this point be more than Bagehot's lender of last resort; it also would be a deposit insurer.

²³ Friedman and Schwartz (1963) argued that the Federal Reserve's failure to offset withdrawals in 1930, and again in 1931, allowed a severe, but not atypical, recession to develop into the Great Depression.

²⁴ This static analysis is intended only to provide an idea of the relative magnitudes involved. If the narrow-bank structure were adopted, one would expect the price of shortterm debt to rise relative to long-term debt, thus steepening the yield curve.

²⁵ See James (1987).

²⁶ Note that these firms will be neither regulated nor supervised.

²⁷ A third alternative to deposit insurance is to eliminate the debt features of bank deposits. In particular, banks could offer an account similar to a claim on a mutual fund, with a value that fluctuated with the value of the bank's assets. A deposit run that forced a bank to liquidate its assets would result in claims of the bank being revalued at a price determined by the liquidation value of the bank's asset portfolio. (See Jacklin (1988).)

Proposals for Reforming Deposit Insurance

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

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

While some reform proposals have focused on restructuring the financial system to alleviate the need for deposit insurance, most reform proposals focus on redesigning the way deposit insurance is provided. These reform proposals typically call for greater reliance on market discipline, risk-related pricing of deposit insurance and less reliance on regulatory discretion in closing institutions.

Conclusion

Deposit insurance enhances the workings of the financial system by all but eliminating bank runs as a means of closing banks. Bank runs are viewed as a form of market failure that can have deleterious effects on the money supply, the payments system, and financial intermediation. Bank runs can inflict systemic damage when contagion arises, and isolated damage when runs on individual banks occur. In addition to these *ex post* effects, there are *ex ante* costs in the form of underproduction of bank services in response to the threat of runs.

The potential for bank runs arises because banks issue liquid liabilities to fund assets that are not easily marketable because outsiders cannot value them easily. This intermediation is a valuable source of liquidity in the economy, but it carries with it the potential for bank runs. Depositors who simply believe that other depositors may withdraw their funds have an incentive to do so also. This fragility can lead to systemic effects if a run on a bank triggers runs on other banks. Contagion can disrupt the payments system, thereby impeding the flow of goods and services throughout the economy. If contagion involves a flight to currency, remedial action is necessary by the central bank to avert a collapse of the money supply.

Even if contagion does not result, there are costs of isolated bank runs. These costs arise because, once the bank has drawn down its normal inventory of liquid assets to satisfy withdrawals, it must begin to sell off its illiquid assets. These are assets that banks fund which allow productive investment by borrowers who do not have direct access to credit markets because of the informational costs of evaluating and monitoring their creditworthiness. As a result, banks have private information about these assets and, because efficient markets for these assets do not exist, there are deadweight losses associated with their premature sale.

In addition to the *ex post* costs of bank runs, contagion and liquidation, there are *ex ante* costs arising from the threat of bank runs. To avoid the liquidation costs resulting from a run, a bank may choose (or depositors may require a bank) to hold more liquid assets. This will reduce desirable investment by the class of borrowers lacking direct access to markets. Alternatively, the bank may respond to the threat of runs by funding illiquid assets with fewer liquid liabilities, thus reducing the liquidity available in the economy.

The externalities and information costs inherent in banking are market failures which prevent an economy from achieving the "first-best" allocation of resources associated with perfect markets. Consider a fictional economy from which bank runs had been exorcised without cost. In this first-best economy, banks would provide liquidity and hold assets for which markets had not arisen. The activities of banks would also include those activities that were complementary to this intermediation. Bank owners would earn a competitive return on capital, borrowers would pay loan rates reflective of the risk of the loans, and depositors would demand deposit rates reflective of the riskiness of the bank's portfolio.

The presence of the threat of bank runs makes this result unattainable. In an economy without government intervention, market participants would take steps to mitigate problems arising from bank runs. Depositors would require banks to choose portfolios that made bank runs either less likely or less damaging; as a result, banks would substitute marketable assets for nonmarketable assets. In addition, depositors would charge banks a risk premium that reflected not only the portfolio risk mentioned above, but also included a component to reflect the risk arising from the threat of bank runs. Bank closings would be triggered by the actions of nervous depositors and would likely spill over into other areas of the economy. Closure and bankruptey laws would need to address the discontinuity in the value of bank assets, *i.e.*, the distinction between going-concern and liquidation value; this may involve higher capital levels, early closure, or extended liability for bank owners. All of these effects imply a diminution of bank services relative to the first-best economy.

Credible deposit insurance removes the incentive of depositors to participate in bank runs; if it could be provided free of cost, the first-best allocation would result. Of course, deposit insurance cannot be provided free of cost, because the problems that create the need for deposit insurance also hamper the insurer's ability to provide perfect insurance. Ideally, the insurer would like to have depositors charge banks a risk premium that included only the portfolio-risk component, and not the "bank-run" risk component. Unfortunately, the insurer is not able to expose depositors to the one risk without also exposing them to the other. To the extent that depositors charge banks for that risk, the costs of bank runs, even if runs do not occur, are implicit in the system and the economy moves away from the first-best allocation. Alternatively, the insurer itself would like to charge banks the portfolio-risk component as an insurance premium; however, the insurer cannot know what that premium is. Nor can the insurer solve the problems resulting from the discontinuity of the value of bank assets.

The result of these factors is that banks do not face the same deposit costs nor hold the same assets that banks in the first-best world would. This is the distortion that results from deposit insurance. Depending on the corrective steps the insurer takes, the deposit insurance economy may have, relative to the first-best economy, more or less funding of nonmarket assets, more or less provision of liquidity, and more or less risk-taking.

To minimize the distortions of deposit insurance while maintaining stability, the insurer seeks to rely on market forces that are not associated with bank runs. This means putting owners and managers at risk for portfolio choices. However, because these parties' risk-return decisions will not coincide with the insurer's, the insurer must employ nonmarket measures to prevent banks from transferring risk from themselves to the insurer without compensation. These measures include the monitoring of banks through bank examinations, the implicit pricing of deposit insurance through regulation and supervision, forbearance, and closure policies that enforce desirable market discipline and that recognize and ameliorate the problems arising from the discontinuity of bank asset values.

Can deposit insurance work well? If the criterion is the first-best world, the answer is no—unless the problems faced by the insurer are insignificant, in which case deposit insurance is unnecessary. If the criterion is the *laissez-faire* world, it seems reasonable to believe that the benefits of eliminating bank runs could outweigh the costs of a well-run insurance system. Of course, a poorly administered system could inflict costs in excess of its benefits.

Does deposit insurance work well? The past decade has raised doubts in many minds. Many observers feel the current system is fundamentally unstable and that major reform is necessary to prevent complete collapse of the system. This view typically holds that the instability has arisen over the past decade because 1) deregulation has removed explicit controls on risk-taking, 2) increased competition has reduced the charter value of banks, thus reducing selfcontrol on risk-taking and 3) deposit insurance has not responded to the need to replace these controls. The empirical evidence for this view currently derives primarily from the plight of the FSLIC. This view holds that while the FDIC may appear healthy at this point, the FDIC is in fact on the same path as the FSLIC, simply a few steps behind. This view has understandably led to calls for major reform. The impact of many of these reforms would be a movement toward the laissez-faire world, either by imposing depositor discipline, lowering the return on bank capital, or prohibiting the intermediation performed by banks

(the narrow-bank proposal). This implicitly reflects a judgment that the costs of the current system outweigh the benefits.

An alternative, opposing view is that over the past decade, the banking and thrift industries have been subjected to major economic shocks and that the difference in the condition of the two insurance funds reflects both the different problems faced and responses taken by the respective regulatory authorities.²⁸

When a situation exists in which reasonable observers can hold starkly contrasting views, it is fair to ask under what conditions the subscriber of a particular view would change his or her view. Regarding the issue at hand, the relevant questions are as follows: What events would have to occur in order for proponents of major reform to find the current system imperfect, but acceptable? Conversely, what events would lead opponents to conclude that major reform is necessary? While it is doubtful that any events could lead to clear and complete conversions, it seems reasonable to focus on the performance of the banking industry over the next several years. Proponents of major reform presumably expect the situation to deteriorate, with bank failures becoming more frequent, more costly, and leading to further erosion of the insurance fund. Those who call for modest reform expect, assuming that reform is achieved, the situation to stabilize, with fewer bank failures and a return to growth of the

²⁸ While it is useful to compare the FSLIC and the FDIC, one has to guard against belaboring the comparison. The circumstances faced by the two insurers were not identical, and one cannot draw ironclad conclusions. Suffice it to say that the recent experience of both agencies can provide insight into the conditions necessary for effective deposit insurance. insurance fund.²⁹ Thus, the issue should, and presumably will, be revisited in the coming years.

²⁹ Some proponents of major reform will not be persuaded by a resurgence of the banking industry, feeling instead that the system is, a priori, unstable, and that any calm will be temporary. At that point, however, the burden is on those observers to clarify their position. It is not enough to: 1) point out that a deposit insurance economy does not achieve the first-best allocation; that is the definition of second-best; 2) appeal to models that derive instability by ignoring constraints and objectives that, in fact, are present in the system; or 3) point to a limited period during which the insurer suffered losses; presumably a deposit insurer provides intertemporal insurance.

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Deposit Insurance Coverage

Should the \$100,000 Deposit Insurance Limit Be Changed?

by Frederick S. Carns*

n considering how to harness market forces to better control bank risk-taking, it often is recommended to alter the \$100,000 statutory limit on deposit insurance coverage. The most common suggestion is to reduce the scope of coverage-and thus promote "depositor discipline"-either by lowering the dollar amount of coverage per deposit or restricting coverage to particular deposit classes. Occasionally, however, it also is suggested that deposit coverage be expanded in order to facilitate methods of failure resolution that may elicit stronger discipline from nondeposit creditors. This article considers the merits of proposals to enhance market discipline through changes in the statutory limit on deposit insurance coverage.

Market discipline-the presence of market-determined incentives to control risk-taking-has many dimensions in banking. At the bank level, the potential sources of discipline include depositors, shareholders, managers, subordinated debt holders, and other nondeposit creditors. The bank holding company also is a potentially important source of discipline for the bank. Holding company shareholders and creditors have wealth at stake and, hence, have incentives to constrain the bank's actions. While this article focuses on discipline at the bank level and primarily on depositor discipline, any complete analysis of market discipline in banking must consider the role of nondeposit bank creditors, holding company creditors, and the incentive effects created by alternative failure-resolution methods (see FDIC (1989, forthcoming— Chapter 7)).

As indicated in Murton (1989), it is the asymmetric information associated with bank assets and the combination of these assets with callable liabilities that make exreliance on market clusive discipline-particularly depositor discipline-potentially problematic. Ideally, the market restrains risktaking by imposing premiums (or, when necessary, covenants in loan contracts) that raise a bank's cost of funds commensurately with the assumed risk. In reality, the asymmetric information problem is a potential impediment to accurate pricing (or complete contractwriting) and, hence, to reliable discipline via market mechanisms alone.

Technically, the ideal goal of deposit insurance is to eliminate that portion of the market-determined risk premium reflecting the threat of bank runs without altering the portion reflecting other risks. If achieved, this result would retain all the market discipline exercised in the absence of deposit insurance, but without the social costs posed by bank runs (Murton (1989)). Moreover, in this ideal deposit insurance system, there would be no over-restriction of risk-taking through market mechanisms, *i.e.*, market devices would not be used to impose artificially-restrictive constraints which unnecessarily raise the social costs of intermediation.¹ The nature of bank assets makes it difficult to determine when the optimum balance has been reached, since the need for specialized information makes market assessments of bank risk (and, hence, asset-value determinations) costly, complex, and subject to error.

With these caveats and considerations as a backdrop, the remainder of this article explores the potential for enhancing market discipline through changes in deposit insurance coverage. The focus is on developing appropriate criteria with which to decide whether stronger market incentives are warranted.

Enhancing Depositor Discipline: The Trade-Off

Given broad agreement that the present coverage limit is adequate to provide a safe haven for small savers' funds, and given no realistic legislative prospect of a rollback large enough to threaten the adequacy of the statutory limit for this purpose,

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

the issue of the proper coverage level turns largely on the matter of financial stability.² In determining the proper statutory limit for insurance coverage, policymakers face a tradeoff between two potential sources of financial instability: bank runs, which may be contagious, and excessive risk-taking by banks. While insurance coverage enhances stability in wellknown ways, it simultaneously weakens two potential sources of incentives to limit bank risk-taking: the threat of runs and the demands of depositors for higher yields from riskier banks. The terms of the tradeoff between bank runs and risk-taking are determined by the likelihood of runs and the magnitude of the threat they pose, as well as the comparative effectiveness of depositor discipline and its substitutes under deposit insurance. These are considered in turn.

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

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

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

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

Such implicit judgments, and not the historical "facts," are most properly the focus of the policy debate. The crucial question is not whether the facts prove that historical (more market-oriented) arrangements were good or bad, it is whether some level of deposit insurance coverage represents a viable, long-run alternative to these arrangements that is clearly better. Thus, a fundamental issue is how this judgment should be made.⁶ Two perspectives merit consideration.

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

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

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

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

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

First, the recognition of banks as "special" intermediaries creates a predisposition to avoiding bank runs, as noted by Murton (1989). Runs impose the very costs (of spot-market valuation) that banking serves to avoid. They interrupt transformation services directly, while the threat of runs causes bankers to underproduce liquidity, thereby precluding the realization of aggregate economic potential. In effect, runs nullify banking's unique contribution to economic activity. It follows that any form of depositor discipline creating a susceptibility to bank runs is to be avoided, absent convincing evidence that reliance on alternative (nondeposit) risk controls is potentially more costly than bank runs. According to this view, there is "a much stronger case" for 100 percent coverage than for any reduction in the statutory limit (Diamond and Dybvig (1986)).

An alternative perspective on bank uniqueness regards the cost of bank runs as the short-run price that necessarily must be paid for long-run stability.7 The crucial judgment here takes one of two forms: (1) the containment of bank risk-taking is technically infeasible without greater reliance on depositor discipline, due to inadequacies in available analytical tools or logistical impossibilities; or (2) without substantial depositor discipline, deposit insurance necessitates reliance on forms of risk control that are self-defeating in the long run, due to incentive problems created both by insurance coverage and institutional arrangements in public bureaucracies. The first type of argument appears to be contradicted by FDIC supervisory experience and by other types of evidence presented elsewhere in the FDIC's forthcoming study on deposit insurance reform (particularly Chapters 3 and 5). Thus, only the second type of argument is examined here.

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

The unique economic value of liquidity transformation may be used as an argument for higher levels of statutory coverage, while the "depositor discipline" approach may be used to suggest the opposite (Diamond and Dybvig (1986); Kane (1986a)). Neither argument can be completely convincing, because each considers only one side of the tradeoff between bank runs and bank risktaking. The first presents a strong theoretical case against bank runs as a form of discipline, but fails to establish convincingly that there exist feasible real-world alternatives to bank runs that are better (less costly). The "depositor discipline" argument makes a plausible case that some threat of bank runs is a necessary evil, but fails to establish convincingly that reliance on nondeposit sources of discipline poses greater economic risks than does the threat of runs.10

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

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

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

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

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

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

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

Nonetheless, there are no obvious analytical errors or inconsistencies to serve as a basis for neglecting the implications of either approach; nor is it necessary to choose between them. Both are plausible, and if the coverage issue is viewed as a mutually exclusive selection between these views, then there can be no clear choice, no credibly "coherent" policy strategy (see footnote 6). Given our current understanding, the reality is that any selection of a coverage limit must be uncomfortably arbitrary and, for any amount of coverage greater than zero but less than 100 percent, there will be an unavoidable risk (of uncertain proportions) that neither bank runs nor bank risktaking is sufficiently contained to preserve stability.¹³ A more reasoned response is to acknowledge these uncertainties and adopt an approach aimed at minimizing the potential costs associated with them.

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

To summarize, selection of a statutory insurance limit poses a trade-off between two potential sources of financial instability: bank runs and bank risk-taking. The direction in which coverage should be altered, if any, depends upon which of the alternative risks is greater. This determination calls for a cost comparison, but measurements conflict for even the most "objective" components of the relevant costs, and the largest components are inherently subjective, therefore immeasurable.15 Hence, proposed rankings of the relative risks necessarily reflect the subjective emphasis of a particular analytical approach more than any detached weighing of empirical data. Neglecting either of the potential risks may produce financial instability of one type, yet attempting to balance the two risks by selecting a particular trade-off will not guarantee financial stability of either type. This suggests that policies aimed at improving the terms of the trade-off (limiting the potential costs associated with both types of risks) may be most productive. Marketbased policy options of this variety are considered below.

Deposit Size versus Deposit Maturity

The terms of the trade-off between bank runs and bank risk-taking might be altered favorably by insuring deposits on the basis of maturity rather than size. Conceptually, maturity-based deposit insurance has distinct advantages over the current system. Short-term deposits, particularly transactions deposits that are made available on demand, are

¹¹ Formally, it is true that so long as there is depositor discipline, there is also the theoretical threat of runs with its deleterious effect on liquidity transformation. However, the theoretical possibility of runs on solvent institutions has not been borne out in practice. as noted. This may be because of "conjectural" (de facto) guarantees or it may be that the relationship between coverage levels and the probability of runs is more step-like than linear. Regardless, there is reason to believe that the present setting succeeds in providing run-free risk premiums on deposits without destabilizing the balance of bank-portfolio risks (Murton (1989)), and this warrants considerable weight in contemplating proposed changes in the coverage limit.

 12 This follows from the suggestion in Chapter 2 of the FDIC's forthcoming study that moral hazard is not necessarily unstable dynamically and does not appear to be out of control.

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

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

¹⁵ Strictly speaking, no component of true economic costs is fully objective. See Buchanan (1966). Here, "objective" means costs that are routinely measured by economists using widely-accepted estimation techniques. the primary source of bank runs.¹⁶ Restricting insurance coverage to short-term ("runnable") deposits, regardless of size, is clearly consistent with the primary objective of deposit insurance-to avoid the costs of bank runs without inducing excessive risk-taking-and appears to have a clearer rationale on this basis than does coverage based on deposit size. That is, while the threat posed by instantly callable deposits is well established, there appears to be no such connection between the size of deposit accounts and the probability (or social cost) of bank runs (Furlong (1984)).

Moreover, coverage based on maturity could, in principle, eliminate bank runs without the complete sacrifice of depositor discipline entailed by 100 percent coverage; the latter being the only available option for eliminating runs (with certainty) when coverage is based on deposit size. Longer-term deposits would be at risk under a maturity-based system, thus preserving some incentive for monitoring by depositors.

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

There also may be more fun-

damental problems with maturitybased coverage. Maintaining an effective distinction between short- and long-maturity deposits depends upon the severity of prepayment penalties and other disincentives to cash in early. Banking stability may be threatened if longer-term deposits are too easily withdrawn, while bank profitability may be impaired if there are high costs associated with enforcing the withdrawal penalties necessary for stability. It remains unclear whether a viable maturitybased structure could be devised.

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

In any case, these added costs must be weighed against the potential benefits of such a switch, and it is not fully clear that the gains would be large. Certainly, there could be no fewer runs on solvent institutions than presently, and the effectiveness of depositor discipline could not be greatly improved unless failureresolution methods also were altered to weaken existing de facto guarantees. Since the constraints on the FDIC's options for failure resolution are unlikely to change in the near future (FDIC (1989, forthcoming)), the depositor-discipline effect of any change in the basis for coverage is likely to be limited. In the longer run, if failure-resolution methods are modified to reduce the scope of *de facto* guarantees at the bank level, the potential benefits of a maturity-based system may appear

greater. At this time, however, the uncertainty surrounding the costs and the lack of a clear prospect for significant gains suggest there is insufficient evidence to warrant a switch to maturity-based coverage.

One-Hundred-Percent Coverage

The statutory coverage limit is indicative of the prevailing balance between run prevention and depositor discipline only in the absence of implicit types of coverage for depositors. Recognizing this, some have concluded that the FDIC's stated policy of resolving failures (the use of P&As whenever feasible) has effectively reduced depositor discipline to miniscule proportions and has weakened nondeposit sources of market discipline in the process. In other words, this view suggests that the real trade-off of run prevention for depositor discipline reflected in the current operation of the deposit insurance system is essentially a wholesale trade of all market discipline at the bank level for virtually complete protection against runs on solvent institutions, despite appearances created by the statutory limit.17

This type of argument typically leads to a conclusion that explicit, 100 percent coverage is appropriate.¹⁸ It suggests there is nothing to be lost in the way of

 i^{7} In the framework of footnote 14, it is alleged that the present operation of the deposit insurance system amounts to the selection of a "corner solution" on the curve, corresponding to a maximum protection against runs and zero depositor discipline.

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

¹⁶ Longer-term deposits also can be a source of "runs" in that depositors may decline to "roll over" this type of bank debt. This is different from the traditional notion of a bank run and it entails different costs than those that form the basis for deposit insurance protection. As described by Murton (1989), it is the immediate, forced liquidation of bank assets entailed by a (traditional) run that generates the types of costs that provide a rationale for deposit insurance.

depositor discipline, and there are several gains to be made.¹⁹ First, full coverage could result in somewhat greater stability than is now common, eliminating some uncertainty and perhaps providing an environment that would allow for a more orderly resolution of failures. Recalling that a major function of deposit insurance is to remove the economic inefficiency associated with the threat of runs, full coverage does this most certainly and completely. Second, it would produce a more equitable system in the sense that large depositors would be treated equally regardless of the circumstances surrounding a bank failure, and small banks could compete for large deposits on more equal footing with big banks. Third, although full coverage would possibly reduce depositor discipline, it could increase market discipline overall (say, if deposit transfers were to replace P&As as the primary method of failure resolution-see FDIC (1989, forthcoming-Chapter 7) on this point). Finally, full coverage would not change the FDIC's failure-resolution costs appreciably under current methods of handling failures and, with minor changes in failure-resolution procedures under a full-coverage scheme, the fund's risk exposure could probably be reduced. (Again, see Chapter 7 of the forthcoming FDIC (1989) study for details, as well as Silverberg (1988).)

The major difficulty with this argument is the assumption that depositor discipline is completely absent from the current environment. While the evidence is mixed, some recent studies contradict this, suggesting that CD markets are fairly sensitive to bank-specific risk and act as a constraint on banks wishing to pursue riskier positions.²⁰ This constraint may be necessary for control of bank risk-taking in a deposit insurance environment, given the artificial incentives to incur risk.

Even in the absence of this evidence, however, it may be argued

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

These considerations suggest that, despite a standing failure-resolution policy that generally results in full coverage, there remains some valuable depositor discipline in banking. Thus, the proposal for 100 percent coverage may amount to a trade-off of discipline for little, if any, added protection against damaging runs.²¹ To the extent that P&As become feasible for a larger proportion of failure resolutions in the future, depositor discipline may weaken and the case for full coverage may appear stronger. At this time, however, the complete removal of deposit exposure presents excessively uncertain, and potentially hazardous, implications for the control of bank risk-taking.

Limits on Brokered-Deposit Coverage

It often is suggested that market incentives for controlling risk are unnecessarily weakened with the nearly limitless extension of insurance coverage made possible by deposit brokerage. Weak institutions always

can obtain funding by offering a small premium above insureddeposit rates because brokers package deposits into hundredthousand-dollar bundles for sale to the highest bidder. Depositors can use brokers to economically achieve complete insurance protection (\$100,000, times the number of insurable accounts per institution, times the number of insured institutions), and this ability allows risktaking institutions to acquire funds for far less than the true market price of the assumed risk. One way to reharness market forces to control risk-taking would be to limit insurance coverage for brokered deposits. Another might be to restrict coverage to some maximum amount per individual rather than per account; and a third might be to limit the rates banks may pay for insured funds.22

These proposals ignore FDIC examination experience, which suggests that supervision can, in general, effectively discriminate between sound and unsound uses of brokered funds (Harless (1984)). Moreover, recently proposed changes in reporting requirements should enhance examiners' ability to detect brokereddeposit abuses early. Supervisors will get clear signals that closer scrutiny is warranted. Additional signals may take the form of increases in offering rates and the growth of brokeredfunds purchased. Once in the bank, supervisors can evaluate the quality of lending in the usual manner. This indicates that the brokerage of funds is not a special problem, but part of the more general incentive problem in deposit insurance.

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

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

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

²² See Mussa (1986a), Kane (1985a), FDIC (1983), and their references.

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

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

Deposit brokers perform a valuable economic function to the extent that they allocate funds to the banking system's highest-valued uses at a smaller cost than could otherwise be achieved.23 Thus, proposals that would alter insurance coverage in order to curtail abuses of insureddeposit brokerage may also reduce the efficiency of deposit allocation in the financial system. At the same time, such proposals threaten to increase instability, reduce total liquidity, and raise the costs of intermediation by placing more deposit funds at risk. Given the supervisory experience with brokered funds, it is not clear that the proposals to alter coverage offer a benefit of sufficient size to warrant the potential costs.

Similarly, the suggestion to cap rates payable for insured funds lacks

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

This argument clearly has some merit, but if there are regional or other differences in lending prospects that warrant vigorous competition for funds, and if competition via pricing is most efficient, then there may be some economic justification for premiums beyond those noted in the argument. Regardless, the proper size of the premium is unknown, and thus, the allocative implications of a rate cap are uncertain. Moreover, experience with Regulation Q and other price controls suggests that these are among the easiest proscriptions to circumvent: numerous forms of nonprice competition are available (and innovation certainly will create others), and fees to deposit suppliers may be substituted for higher yields. It is therefore not obvious that a rate cap would alter the outcome and, if it did, it is not obvious that this would be preferable to the outcome achievable via supervisory efforts.

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

Concluding Remarks

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

In the absence of concrete information regarding which institutional arrangements are optimal at a given time, or knowledge of the pace at which evolution is changing the optimal arrangements (if at all), it is important to avoid premature experiments that may have irreversible consequences.²⁴ While market discipline clearly plays an important role in controlling risk, it is not clear that present circumstances warrant altering insurance coverage to create an expanded role for the market. It is not apparent that greater market discipline of this type is now necessary or potentially more beneficial than existing arrangements

Greater reliance on the market is most questionable in the area of depositor discipline. The primary goal of deposit insurance is to remove the untoward effects of bank runs without otherwise altering the unfettered market outcome. This suggests that escalating the threat of

²⁴ As long as there remains a plausibly sound reason for treating banks specially *via* deposit insurance, then the fact that deposit insurance is already in place supports a conservative posture in considering measures that may impact banks' special intermediation function. Only clear evidence that this latter function is obsolete, or changing in its fundamental nature, would warrant a fundamental change in posture.

²³ It is not certain that deposit brokerage enhances the efficiency of the deposit allocation process but, in the absence of evidence to the contrary, efficiency-enhancement seems a likely source of its economic viability.

runs by exposing depositors to greater risk is unwarranted unless it can be shown that this is imperative for controlling risk (or, what amounts to the same thing, that present coverage levels excessively or unnecessarily distort the free-market outcome). No such finding is clearly

supportable by the arguments or evidence adduced here.

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Forbearance: Practices and Proposed Standards

by Dean Forrester Cobos*

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

Background Tiered Supervisory Forbearance

Since the 1930s, a complex structure of "tiered" supervisory reactions to a given set of problems has evolved for use by the FDIC. These tiered responses are applied, on a case-bycase basis, depending upon the perceived severity or level of risk exposure posed in a particular situation. They also can be imposed in a progressive series of escalating actions as may be deemed appropriate in order to lower risk levels and control losses arising from the actions of an insured institution.¹

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

The simple fact is that most FDICinsured depository institutions identified as posing a definite threat of loss to the insurance fund are successfully restored to a safe-and-sound operating condition and do not ultimately fail. Effective supervision, including the use of discretionary supervisory forbearance, has proven to be a very cost-effective lossprevention mechanism for the deposit insurance fund. In the oneyear period ending June 30, 1988, for example, 181 FDIC-insured banks were closed or granted financial assistance. At the same time, however, almost one-third, or more than 500, of the 1,624 banks on the FDIC's problem-bank list were removed because of their substantially improved condition or their nonassisted merger into a sound financial institution.²

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¹ A description of supervisory enforcement authority and related powers available for use by the FDIC can be found in Section 8 of the Federal Deposit Insurance Act (codified to 12 U.S.C. 1818(a) through 1818(r) and 1828(j)). ² During the twelve-month period ending June 30, 1988, a total of 542 insured institutions were added to the FDIC's "problem bank" list while 690 were removed. The removals may be categorized as follows: 181 were closed or granted financial assistance; 87 entered into a nonassisted voluntary merger with another institution; and 422 showed significant improvement in condition and no longer

presented an undue risk to the deposit insurance fund. The total number of problem banks as of June 30, 1987 was 1,624; the number as of June 30, 1988 was 1,476.

Exercising Supervisory Discretion

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

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

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

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

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

Congressionally Inspired and Mandated Forbearance

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

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

The group of financial institutions so categorized usually has been homogeneous, in that they operate in a particular geographic area or with similar investment characteristics. Also, the problems that prompted the Congressional action were widespread and concern had been raised that the banking public might view a large number of failures

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

among the group as a regional or national calamity. Recent examples of groups receiving broad-based supervisory forbearance include thrift institutions impacted by high and volatile interest rates in the late 1970s and early 1980s and agricultural-based lending institutions impacted by the more recent sustained downturn in the agricultural sector.

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

FDIC Experience with Forbearance Programs Agricultural Loan-Loss Amortization Program

During the mid-1980s, many areas of the United States experienced a protracted downturn in agricultural activity that adversely impacted both the agricultural sector and many related businesses, including financial institutions. Particularly hard hit were agricultural creditors whose increased inability to collect contractual debt led to increased numbers of bank failures.

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

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

From the program's inception through December 31, 1988, the FDIC received 81 formal requests for consent to defer agricultural loan losses under this program. As of that date, there were 35 institutions, located in eleven midwestern, southern, and southwestern states, which had been approved for participation.⁵ While the approval rate may seem quite low, in fact, only 19 of the applications have been denied. The focus of the review process has been on judging the management's ability to develop and implement a realistic capital augmentation plan aimed at ensuring the institution's future viability.6

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

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

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

The Congressional intent, the FDIC's goals and the banking industry's interests appear to be in harmony on this point. For example, the legislative history of the implementing legislation indicates that the agricultural loan-loss deferral program was intended to allow "fun-

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

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

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

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

damentally sound banks to weather (the current) storm."⁸ There is no indication of any intent to artificially sustain institutions that are clearly insolvent or that are not viable over a reasonable time horizon.

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

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

There is a long tradition of imposing similar criteria (plus an assessment of the management) in judging requests for bank and thrift charters, the granting of deposit insurance protection, and most mergers, acquisitions or other expansion proposals. The approval or denial of forbearance requests, under this and similar programs, generally is consistent with traditional operating and statutory practices. In fact, several landmark pieces of banking legislation, spanning several decades, have used almost identical language in setting forth these fundamental safetyand-soundness considerations.9

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

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

Capital Forbearance Program

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

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

Like the agricultural loan-loss deferral program, the FDIC capital forbearance plan was aimed at banks with inadequate capital. The programs are quite specific on this point. The capital deficiency must be the result of adverse economic conditions rather than the consequence of losses arising from poor lending decisions by bank management. While the loan-loss amortization program is limited, by statute, to agricultural loan losses in small agriculturally oriented banks, the FDIC capital forbearance program is available to any insured bank meeting the relatively broad criteria. As with the mandated loan-loss amortization program, reasonable recapitalization plans and a future viability standard of the institution are keystones of the program.

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

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

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

The acceptance of and participation in this broader capital forbearance program have been noticeably greater than the Congressionally mandated loss deferral plan. From inception in March 1986 through December 31, 1988, a total of 312 applications have been made to the FDIC by insured banks seeking forbearance from normal supervisory capital standards. Of these, 181 have been approved. The denial rate has run at about 25-30 percent of those submitted. Denial has been for the same primary reason as with the loan-loss deferral program; that is, failure of the institution's management to convince the FDIC that they can, over time, augment the capital structure and become a viable, profitable entity.

A total of 125 capital maintenance plans are in place in 13 midwestern and southwestern states and Alaska as of December 31, 1988.¹¹ Unlike the record with the agricultural loanloss deferral program, however, there have been 56 terminations of participation in the capital forbearance program. The reasons for termination include eight because of the closing of the bank, nine as a result of significantly improved financial condition and fourteen due to charter conversion or merger into another institution.

Forbearance Practices for FDIC-Insured Thrifts

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

At this same time, interest-rate ceil-

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

The situation was further exacerbated by the limited investment flexibility available to some thrifts under their governing statutes, which varied widely by individual state. Relative to commercial banking powers, thrifts were generally, but not always, subject to greater restrictions. Some thrifts, like those operating in New York state, also were subject to deposit-based "franchise taxes" which were payable to the state whether or not the institution was profitable. Many of these restrictions resulted in an additional drain on savings bank capitalization. In extreme cases, these restrictions substantially increased the potential loss to the deposit insurance fund.

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

financing to the home mortgage market."¹³

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

Income Maintenance Agreements

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

The course of action chosen by the FDIC was to directly address the problem by forcing the weaker thrift institutions to merge into healthier

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

¹² FDIC (1984), p. 99.

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

¹⁴ FDIC (1984), p. 99.

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

banks or thrifts. The quid pro quo, to entice a potential merger partner, was the offer of a "floor" or guarantee of a market rate of return on the acquired assets through the use of Income Maintenance Agreenients. Essentially, the FDIC agreed to pay the assuming institution the difference between the yield on acquired "earning" assets (primarily mortgages and securities) and the average cost of funds to savings banks. The agreements, however, were structured so that such interestrate protection was not just onesided. In the event rates declined, these savings banks would be required to make payments to the FDIC.

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

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

Between 1981 and early 1983, Income Maintenance Agreements were utilized in nine of the 12 assisted mergers of troubled savings banks. It should be noted that these insolvent institutions did not technically "fail" and were not closed, per se; they were merged into operating firms. Depositors and general creditors, therefore, experienced no loss. Because these were mutual institutions there were no stockholders with a receivership interest. Subordinated note holders, generally through negotiation, received some, but diminished, value for their investment. The FDIC also insisted on the removal of senior management and most of the trustees of acquired institutions. These "conditions" for the granting of forbearance mitigated, to some extent, the charges that the FDIC was supporting institutions whose management had failed to compete effectively in the market.

Net Worth Certificate Program

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

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

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

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

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

¹⁶ Ibid., p. 4.

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

have been issued to savings banks in Oregon, New Jersey and Pennsylvania.

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

Standards for Forbearance Programs Defining Successful Forbearance Practices

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

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

Supervisory forbearance should not be used as an indirect government shield to support high-risk endeavors or to perpetuate weak management practices which contributed to the existing troubled status of the institution. Further, forbearance must not provide an opportunity for new expansion efforts or indirectly provide the financial incentives for additional or greater risktaking. Quite simply, supervisory forbearance must not underwrite existing unsuccessful policies, speculation or new growth.

Addressing Competitive Inequalities

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

It is difficult to dismiss the potential for adverse impact on healthy, well-managed firms when lesssuccessful institutions are singled out for special treatment and granted some benefit. Further, it must be recognized that the granting of forbearance to weakened institutions, unfortunately, has the potential to become a disincentive to the pursuit of safe-and-sound practices by others. To the extent that increased risk-taking behavior is encouraged because of forbearance, such practices work to the disadvantage of the deposit insurance agency in that risk exposure will ultimately be increased.

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

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

If specific restrictive covenants are placed in forbearance agreements at the time of negotiation, multiple concerns can be successfully addressed. Other restrictions on preferential insider transactions. dividend payments, management compensation and similar items can help to ensure that the institution's owners and managers will not unduly profit or gain personal benefit from the granting of forbearance. Once again, such measures, if prudent from a safetyand-soundness perspective and if followed, will help in restoring the institution to health. Through the use of carefully crafted restraints, appropriate to each individual situation, safe-and-sound operating policies can be encouraged, while at the same time concerns over competitive advantages, unjustified enrichment of insiders and other inequities can be largely ameliorated.

Basic Forbearance Standards

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

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

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

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

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

Forbearance should be a temporary measure. Survival of the institution receiving forbearance should not require a permanent reliance on the waiving of normal supervisory or enforcement practices. Also, the supervisor should have the flexibility to put a reasonable time limit on achieving positive results. The continuation of forbearance should correlate directly with the actual (initial and interim) success of management's efforts to address problems.

Forbearance should have no permanent structural impact. Great care should be taken so as not to provide supervisory or regulatory exemption from basic rules or industry practices that will change the nature or structure of the industry or the scope of its activity. Further, any forbearance that will result in changes which are, in fact or practice, irreversible should be avoided. The goal of forbearance, absent a Congressional mandate to the contrary, should be neutrality in structural matters; not to effect permanent change.

Forbearance should be coupled with some limits on growth, speculation and new risk-taking ac*tivities.* While the supervisor needs to retain flexibility in the actual implementation, general growth and expansion limits are considered to be a necessary precaution when granting forbearance. Such limits can be periodically modified (made either more severe or more liberal) as individual circumstances may warrant; however, they generally should remain in place as long as forbearance is exercised. In extreme situations, the supervisor may be justified in imposing more severe conditions which mandate a reduction in the size of the institution and the scope of its activity.

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

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

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

- Supervisory approval is required before exercising any powers authorized, but not currently used.
- Supervisory notification is required regarding any change in senior management officials, established management policies or the employment of an outside auditor.
- Supervisory notification is required regarding any significant change in asset composition, liability structure or volume of off-balance-sheet activity.
- Supervisory notification is required regarding significant external events such as the cancellation of blanket bond coverage or involvement in substantive defensive litigation.
- Periodic submissions of business and operating plans must be made to the supervisor.
- Periodic submission of detailed "progress" reports must be made to the supervisor, summarizing the local economic and competitive environment,

the institution's current financial status and the success to date in correcting weaknesses.

Conclusions

Forbearance can be mutually beneficial to both the recipient and the deposit insurer. It provides an opportunity for survival and renewal for the former and can be an expedient, low-cost alternative to failures or lengthy enforcement procedures for the latter. Further, many other favorable benefits often accrue to communities and bank customers when financial institutions can be returned to a healthy, sound operating basis.

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

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

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Recent Developments Affecting Depository Institutions

by Benjamin B. Christopher*

Regulatory Agency Actions Federal Deposit Insurance Corporation

Joint Regulatory Teams For Troubled Thrifts

On February 7, the FDIC announced that joint regulatory teams had begun overseeing the operation of four troubled savings institutions, a move intended to help conserve the institutions' assets and preserve banking services to their deposit and loan customers until a permanent resolution of the institutions' problems can be developed. Basic customer services will not change, and all insured deposits will continue to be protected.

The Federal Savings and Loan Insurance Corporation (FSLIC) appointed the FDIC conservator for these institutions as part of a new interagency program announced February 6 by President Bush to help develop solutions for the FSLIC's inventory of insolvent savings and loan associations. Other regulatory participants in this interagency initiative are the Federal Home Loan Bank Board (FHLBB), the Office of the Comptroller of the Currency (OCC) and the Federal Reserve Board (FRB).

As of April 15, 1989, there were 219 savings and loan associations (S&Ls) for which the FDIC had been appointed conservator. *PR-21-89, 2/7; PR-99-89, 5/18.*

Deposit Insurance Study

The FDIC released a preliminary report on the federal deposit insurance system. Chairman Seidman said the study was undertaken by the FDIC "because of a growing realization that deposit insurance needs some fundamental changes if it is to continue to meet its vital objectives."

Among the key conclusions of the report is that deposit insurers should be organizationally independent and self-funded, with continuing accountability to the Congress. The insuring agency should have the authority to examine all institutions it insures, to withdraw deposit insurance quickly when necessary, and to adjust insurance premiums to reflect recent loss experience. In addition, the insurer should be able to require that all institutions owned by a common parent indemnify the insurer against losses resulting from the failure of a bank affiliate. The Chairman noted also the need to improve the agency's supervisory capabilities.

The study outlined three options for revitalizing and focusing the mission of the FSLIC. *PR-1-89; 1/4.*

Policy Statement On Risk-Based Capital

The Board of Directors approved a framework for bank capital standards that would reflect the relative investment risks of various assets banks hold in their portfolios. The risk-based capital policy statement applies to all state-chartered banks supervised by the FDIC. It does not replace or eliminate existing minimum capital requirements. Similar risk-based capital standards have been adopted by the OCC and by the FRB. *PR-53-89, 3/14; FR, 3/21, p. 1150.*

The FDIC notified insured state nonmember banks that although an explicit minimum risk-based capital ratio will not be in effect until December 31, 1990, banks are encouraged to immediately begin monitoring their own risk-based ratios. To aid banks in this endeavor, the FDIC developed a worksheet and distributed it to the banks. The worksheet will provide a conservative estimate of a bank's risk-based capital ratio. *BL-13-89, 4/14*.

Prior Notice From Banks Planning Rapid Growth

The Board of Directors requested comment on a proposal to require advance notice by any insured bank

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Reference sources: American Banker (AB); Wall Street Journal (WSJ); BNA's Banking Report (BBR); Federal Register (FR); Commerce Clearing House, Inc., Electronic Legislative Search System (ELSS). All ELSS items have been enacted into law when included in this report.

planning to use special funding programs such as brokered deposits, outof-area solicitations or borrowings to finance a rapid expansion of its assets. Under the proposal, advance notice would be required of any institution anticipating asset growth of nine percent or more during any consecutive three months. A report to the agency would be required within seven days if a bank's assets grew by more than nine percent over three consecutive months without advance notice to the FDIC. Most new banks and recently merged institutions would be excluded from the reporting requirements, as would institutions where the growth is in line with normal seasonal changes.

If adopted, the proposal would replace a reporting requirement now applicable to banks accepting significant amounts of brokered deposits and fully insured deposits from other depository institutions. *BL-18-89*, 4/7; *FR*, 4/5, p. 13693.

Concentrations Of Credit

In a bank letter the FDIC said experience has shown that concentrations of credit within an institution's portfolio may represent an excessive risk to the institution and the FDIC. Banks should have written loan policies that address this point. These policies should be stated clearly and, at a minimum, should address goals for portfolio mix and place limits within loan and other asset categories. In formulating policies on risk diversification, management also should consider the need to track and monitor the economic and financial condition of specific geographic locations, industries and groups of borrowers in which a bank has invested heavily. Banks are encouraged to use standard industrial classification (SIC) or similar codes to track industry concentration. BL-12-89, 4/25 (revised).

Community Reinvestment Act Statement

The FDIC, the FRB, the OCC, and

the FHLBB jointly issued a Community Reinvestment Act (CRA) Statement. The Joint Statement, which revises a 1980 statement issued by the agencies, is designed to provide federally insured financial institutions and the public with guidance regarding the requirements of the CRA and the policies and procedures the agencies will apply during the applications process.

The Statement strongly encourages financial institutions to expand the CRA statements that are presently required to include information regarding the institution's past record of meeting its obligations under the CRA. It also discusses the role of private meetings between financial institutions and community groups in the applications process, the policy of the agencies regarding private CRA agreements, and the views of the agencies regarding extensions of the public comment period for applications. PR-62-89, 3/21; FR, 4/5, p. 13742.

Audit Policy Statement

The Board of Directors adopted a new policy statement that strongly encourages all state nonmember banks to adopt an annual independent external auditing program, and also suggests that all state nonmember banks establish an audit committee composed entirely of outside directors. It reiterates that newly insured banks are expected to obtain an outside audit for at least the first three years after deposit insurance is granted. A strong internal auditing function, the FDIC said, combined with an annual external auditing program performed by an independent auditor, substantially lessens the risk that potentially serious problems in a bank will go undetected.

It is recommended that annual external auditing programs be performed by either independent public accountants or other qualified independent parties. Copies of the external auditors' reports should be sent to the appropriate FDIC regional office as soon as possible after their receipt.

If a bank's audit committee or board of directors decides not to have an independent public accountant perform an annual audit of the bank's financial statements, the reasons for the committee's or board's decision to use one of the acceptable alternatives or to have no external auditing program should be documented in its minutes. *PR-210-88*, *11/16*.

The Board of Directors proposed a new policy recommending auditing procedures to be performed annually at each FDIC-supervised bank that elects to forego an annual audit by an independent public accountant. In those cases where banks do not engage a certified public accountant to perform an opinion examination. the FDIC recommends that each bank, at a minimum, have certain specific auditing procedures performed annually by a qualified independent external party. The proposed policy statement contains specific recommended auditing procedures for five high-risk areas: securities, loans, allowance for loan losses, insider transactions and internal controls. PR-98-89, 5/16.

Flood Insurance

Insured nonmember banks were notified that they should review their procedures to ensure that they are not making, increasing, extending or renewing any loan (including home equity loans) secured by improved real estate or a mobile home located in a flood hazard area of a community participating in the National Flood Insurance Program *unless* flood insurance has been purchased by the borrower. Banks also must ensure that coverage is renewed and maintained for the duration of the loan.

A recent Flood Insurance Administration study revealed that only 13 percent of insurable household units in special flood hazard areas are covered by flood insurance. *BL*-39-88, 12/5.

Revised Regulations Under Bank Control Act

The FDIC amended its regulations governing submittals and notice publication under the Change in Bank Control Act primarily to implement the 1986 amendments. Under the rule, the FDIC may waive newspaper publication or comment solicitation requirements or act on a proposed change in control prior to the expiration of the public comment period only if the FDIC makes a written finding that newspaper publication or comment solicitation would seriously threaten the safety or soundness of the bank to be acquired. In some circumstances the FDIC may shorten the public comment period to not less than ten days. Effective date: 12/27/88. FR, 12/27, p. 52111.

Deposit Liabilities

The FDIC proposed to find that a bank's liability on a promissory note, bond, acknowledgement of advance, or similar obligation that is issued or undertaken by the insured bank as a means of obtaining funds, is a deposit liability. Under a provision of the Federal Deposit Insurance Act, the FDIC may find and prescribe by regulation that certain liabilities of a bank are deposit liabilities by general usage. There would, however, be a number of enumerated exceptions to the general proviso. *BL*-43-88, 12/21.

Equal Opportunity For Minority Lawyers

The FDIC has committed itself to steering a portion of its outside legal work to minority-owned law firms. The announcement was made in connection with an American Bankers Association pilot program to encourage opportunities for minorityowned firms and minority lawyers who work for large firms. The program involves a voluntary commitment by a number of large corporations to direct legal business to a list of law firms owned by black, Hispanic, native American and AsianAmerican lawyers. An FDIC official said the agency, which used over 600 law firms last year, is reviewing and redrafting how it assigns legal work, and exploring ways of providing equal opportunity to minority-owned firms and minority partners in large firms. *Legal Division, FDIC.*

Federal Reserve Board

Risk-Based Capital Guidelines

The FRB approved risk-based capital guidelines for state member banks and bank holding companies. In the final guidelines the number of risk categories is reduced to four, from five in earlier drafts (see the Fall 1988, *Banking Review*, p. 37). The ten-percent risk category for long-term government securities was eliminated and these securities are assigned a zero risk weighting.

Institutions must have a 7.25 percent capital to weighted-risk asset ratio by the end of 1990, and eight percent by year-end 1992. *AB*, *12/27/88*, *p. 8*; *1/20/89*, *p. 8*; *FR*, *1/27/89*, *p. 4186*.

FRB Will Provide Temporary Assistance To S&Ls

FRB Chairman Alan Greenspan and FHLBB Chairman M. Danny Wall announced a plan for liquidity support to S&Ls. The Federal Home Loan Banks, which are the first line of liquidity support for S&Ls, will continue to provide liquidity for thrifts that meet normal collateral standards. The Federal Home Loan Banks and Federal Reserve Banks will participate in a shared lending program to meet the liquidity needs of S&Ls that do not have access to normal sources of liquidity, including not only Home Loan Bank advances, but also brokered funds and funding derived from repurchase agreements.

Loans made by the Federal Reserve Banks and Federal Home Loan Banks, under the shared lending program, will be collateralized by assets held by the borrowing thrift, and guaranteed by the FSLIC. Under the S&L reform and restructuring legislation proposed by the Administration, the guarantees made by the FSLIC under this shared lending arrangement would be assumed by the Resolution Trust Corporation.

The announcement noted that the Treasury is also participating in this program by advancing funds under its statutory line of credit to the FSLIC, and these funds will, in turn, be made available to thrifts as part of the shared lending. *AB*, 2/24/89, *p. 2*.

As of mid-May, 20 S&Ls had been certified and eight were in process to participate in funding arrangements provided by the Federal Reserve, Federal Home Loan Banks and the Treasury. Only two S&Ls were currently using this funding. *PR*-99-89, 5/18 (FDIC).

Restrictions On Bank Holding Companies' Tandem Thrift Operations

The FRB requested comments on whether certain conditions restricting transactions between thrift institutions acquired by BHCs and other holding company subsidiaries, which the FRB has imposed since 1982, should be retained, modified, or removed. The rules prohibit a BHC's banking and other subsidiaries from acting in tandem with a thrift subsidiary in deposit-taking and loan solicitations. Citicorp requested relief from the restrictions, arguing that they impose unnecessary costs and burdensome inefficiencies, limit services to consumers, and deter thrift acquisitions by BHCs which could help to fulfill the thrift industry's critical need for outside financial and managerial resources. Press Release, Federal Reserve Board, 4/14/89.

LBO Financing

New guidelines for examiners on treatment of bank loans to finance leveraged buyouts state that "banking organizations should establish policies, procedures and controls before becoming involved" in highly leveraged financings. HLFs are defined as loans to borrowers whose debt is more than three times their equity. An official said that examiners would look at loans to HLF borrowers with greater scrutiny, but such loans will not necessarily be criticized. Among the specific guidelines was that borrowers' current and future cash flows should be evaluated "under varying economic scenarios, including the possibility of an economic decline." WSJ, 2/23/89, p. A4.

Truth-In-Lending Disclosure

Credit Cards: The FRB adopted amendments to its Regulation Z to implement charge card and credit card disclosure requirements contained in the 1988 Fair Credit and Charge Card Disclosure Act. The revised regulation requires banks and other card issuers to disclose interest rates, grace periods, and annual fees at the time of customer solicitation. Also, issuers will be required to disclose clearly the methods they use to compute outstanding balances, and to disclose late fees, over-thelimit fees, and minimum finance charges. BBR, 4/3/89, p. 775; FR, 4/6, p. 13855.

Home Equity Loans: The Board proposed revisions to Regulation Z to implement provisions of the Home Equity Loan Consumer Protection Act of 1988. *FR*, *1/23/89*, *p. 3063*.

The HELCP Act requires lenders to disclose the rates and terms of home equity loans at the time a loan application is provided and before the consumer pays a non-refundable fee. Lenders are prohibited from making unilateral changes in the terms of a home equity loan contract, but may suspend access to a home equity loan account or reduce a credit line if the underlying property's value declines, and under other specified conditions. Lenders are permitted to require full payment of a home equity loan balance only if the borrower fails to meet the repayment terms, and under certain other specified circumstances.

The law bars lenders from controlling the home equity loan interest rate index, and also restricts advertising of the loans. *BBR*, 12/5/88, p. 940.

Banks' Financial Disclosures

The FRB amended its Regulation H to require state member banks to make available to shareholders and any member of the public, upon request, information regarding each such bank's financial condition in the form of the bank's two most recent year-end Reports of Condition and Income (Call Reports). As alternatives to furnishing the Call Reports, at each bank's option, persons requesting such information may be given other reports as specified in the amendments.

The amendment also requires state-licensed agencies of foreign banks and state-licensed branches of such banks that are not insured by the FDIC to make available, upon request, certain schedules from the two most recent year-end Foreign Branch and Agency Call Reports. Effective: 4/1/89. *FR*, 2/8/89, *p.* 6115.

State Bank Affiliates Of BHCs May Have To Obtain FRB Approval Of Nonbank Subsidiaries

The FRB proposed that state bank subsidiaries of bank holding companies be required to obtain FRB approval to acquire or hold nonbank businesses as subsidiaries.

The FRB also asked for comment on a proposal to grandfather all or most existing subsidiaries of holding company banks acquired in accord with its existing rule. *WSJ*, 11/22/88, p. *C*15; *FR*, 12/5, p. 48915.

Banks Acquired By BHC May Continue Insurance Activities

The FRB approved an application by Merchants National Corp., Indianapolis, to own and operate two Indiana state-chartered banks which are permitted under the state law to sell property and casualty insurance. In its decision the FRB said that the Bank Holding Company Act does not give it authority over the direct activities of a state bank. As a policy the FRB has favored having the nontraditional banking activities conducted by subsidiaries of BHCs and not by the banks themselves. *AB*, *3/7/89*, *p. 1*.

Securities Underwriting, Brokerage Powers

The FRB granted approval for Bankers Trust New York Corp., Chase Manhattan Corp., Citicorp, J.P. Morgan & Co., and Security Pacific Corp. to underwrite and deal in corporate debt, and to sell common stock within a year. FRB officials said reviews would begin promptly to ensure that the institutions have sufficient capital, internal controls and expertise before being permitted to begin the corporate debt underwriting activities. BHCs entering this business must have capital that is "substantially above" required minimums.

In its approval the Board specified several restrictions on transactions between the parent firms, subsidiary banks, and the securities and other nonbank subsidiaries. Prohibited are loans from the holding companies' banks to the securities underwriting subsidiaries, with some exceptions such as loans to clear government securities. Banks cannot purchase or sell for their own account securities which the subsidiary is selling, though the subsidiary may act as the bank's agent. The BHCs will be required to deduct from capital any investment in or credit extended to the securities unit. A BHC will not be permitted to transfer its capital to the securities unit unless its capital substantially exceeds the eight percent minimum set recently in the FRB's risk-based capital guidelines.

Revenues from the new powers, including those from previously approved underwriting and dealing in commercial paper, mortgage-backed securities, municipal bonds, and consumer-related receivables, may not exceed five percent of the securities subsidiary's gross revenue. FRB officials said the FRB will consider raising this ceiling to ten percent later this year. AB, 1/19/89, p. 1.

CRA Cited In Application Denial

An application by Continental Bank Corp. to purchase the \$19 million-asset Grand Canyon State Bank, Scottsdale, Arizona was denied by the FRB on the grounds that Continental had not met its performance responsibilities under the Community Reinvestment Act. It was the FRB's first CRA-based denial. In its decision the FRB also questioned the propriety of Continental's plans to expand while it is still partly owned by the FDIC. Since 1986 the FRB has permitted Continental to acquire three suburban Chicago banks. WSJ, 2/16/89, p. A3.

Owning Stock Of Mutual Funds

By amendment to its Regulation H the FRB will allow state member banks to purchase and hold for their own account stock in investment companies, if the companies' portfolios contain only securities that state member banks are permitted to purchase directly. These include government securities, corporate debt, and other securities authorized for national banks. Other permissible investments include "futures, forwards, options, repurchase agreements, and securities lending contracts" relating to securities that state member banks may purchase for their own account. State member banks also are permitted under the amendment to invest in stock of money market mutual funds. BBR, 2/20/89, p. 416; FR, 2/17, p. 7180.

Title Insurance

The FRB approved the acquisition of Milwaukee Title Insurance Services Inc. by First Wisconsin Corp., a BHC with 33 subsidiary banks. The acquisition was challenged on the grounds that the 1982 Garn-St Germain Act permits First Wisconsin to provide only the services authorized by the FRB prior to 1971, of which title insurance was not one. The FRB, citing First Wisconsin's subsidiaries' activities in the selling of credit life insurance that were grandfathered under Garn-St Germain, said the holding company could expand its insurance services to include title insurance. *ABA Bankers Weekly*, *11/29/88*, *p. 4*.

Own Account Trading Of Foreign-Exchange Futures

The FRB granted approval for Carroll McEntee & McGinly Inc., New York, a primary dealer owned by three BHCs, to engage in foreign-exchange options, futures, and related transactions for its own account. For the first time the FRB approved foreign-exchange forwards, options, and options on futures transactions for a company's own account for other than hedging purposes. *BBR*, 1/30/89, p. 217.

Currency-Swap Advisory Services Permitted

The FRB granted approval for Nippon Credit Bank, Tokyo to purchase Eastbridge Capital Inc., New York to engage in certain securities activities previously approved for BHCs, and in addition, to advise customers on structuring currency swaps. The FRB said that while providing such advice is a new activity, it is essentially the same as advising on interest-rate swaps. Both transactions have the common objectives of securing lowcost funds and converting one type of risk to another. *AB*, 2/17/89, p. 15.

Foreign-Currency Deposits At U.S. Banks

The FRB, in a reversal of policy, decided to allow deposits of foreign currency in U.S. banks, beginning January 1, 1990. The FRB said it "does not expect such deposits to increase rapidly, or ultimately to accumulate to a large amount given the existing availability of effectively similar instruments. *BBR*, 1/9/89, p. 66; *FR*, 12/29/88, p. 52787.

BHC Allowed To Acquire Failing Thrift, Branching Restricted

The FRB granted approval for Barnett Banks Inc., Jacksonville, Florida's largest BHC, to acquire the failing \$41.4 million-asset First Federal Savings and Loan Association, Summerville, Georgia. The FRB's decision requires Barnett to operate First Federal "as a federal savings bank having as its primary purpose the provision of residential housing credit." Barnett may not change First Federal's name to "any title that might confuse the public regarding its status as a nonbank thrift institution." Among other restrictions, the Board said that First Federal may not operate branches at locations where national or state banks may not branch in Georgia. BBR, 1/2/89, p. 9.

Pricing Policies

The FRB proposed revisions in its services-pricing policies, centering on the "private sector adjustment factor" used to estimate the overhead of banks with which the FRB competes in providing payment and other services. The factor includes estimates of taxes and deposit insurance premiums which the FRB does not pay. Specific changes which are proposed include expanding from 25 to 50 the number of BHCs in the costaccounting sample; increasing the averaging period of firms' results from three to five years; changing the FRB's pro forma balance sheet to reflect the same risk-based capital standards with which banks must comply; and calculating FDIC premiums similar to the way they are calculated for banks, including certain deferred credits that have not been part of the FRB's formula. AB, 1/19/89, p. 2.

Delayed Disbursement Policy

A FRB policy statement urged issuers of teller's and cashier's checks, and check service providers, to adopt practices to ensure that collection delays and returns of these items are minimized. The policy statement was issued in lieu of placing certain restrictions on delayed disbursement practices.

Regulation CC requires that banks make funds available for withdrawal on cashier's and teller's checks on the next business day after deposit. When disbursements are delayed the paying banks may have to make these funds available before they receive credit for the checks. The FRB said it would monitor voluntary compliance, and may approve restrictions if abusive practices continue. *BBR*, 4/3/89, p. 775; *AB*, 3/31, p. 3; *FR*, 4/6, p. 13839.

Office Of The Comptroller Of The Currency

Risk-Based Capital Guidelines

The OCC approved risk-based capital guidelines similar to those which have been approved by the Federal Reserve Board. *ABA Bankers Weekly*, 1/31/89, p. 4; FR, 1/27, p. 4168.

LBO Lending Controls

The OCC issued guidelines to national banks indicating that leveraged buyout lending will be closely scrutinized.

The guidelines said that banks should have separate and specific policies and rules for approving loans for highly leveraged transactions, and explained what they should encompass. Also, separate management information systems should provide periodic reports on the size, quality, and performance of the bank's LBO portfolio.

Individual and aggregate limits should be set on loans for highly leveraged transactions. Where banks and affiliates are participating, limits also should be set on the group aggregate amounts. All entities should conduct individual credit approvals. *AB*, 12/16/88, p. 1.

National Banks' Equity Investments

The OCC proposed amendments to its regulations that require national banks to notify the agency of plans to make certain equity investments which are authorized by statute. The amendments also describe the OCC's existing policies on imposing controls on transactions between a bank and its subsidiaries. *FR*, 1/27/89, *p.* 4038.

Compliance Actions To Be Publicized

The OCC announced a plan for public disclosure of bank compliance enforcement actions on a case-bycase basis. Agency officials said decisions on whether to publicize would take into account the need to educate the public about banks' responsibilities, to protect bank customers, thwart future problems, and the potential adverse effects of disclosure. *BBR*, 1/23/89, p. 155.

Expanded Branching Permitted

Illinois: The OCC decided that a national bank could establish a subsidiary which can accept deposits, close loans, and offer other bank services at offices throughout Illinois. The state's law permits a statechartered bank to establish up to five offices "within certain limited distances from the bank's main premises." However, banks also are allowed to set up corporations that can engage, anywhere in the state, in any bank functions except taking deposits and paying checks. Courts invariably have held, said an OCC official, that when such offices are closing loans they are engaging in branch banking. BBR, 12/12/88, p. 996.

Missouri: The OCC granted approval for First National Bank & Trust Co., of Columbia, Missouri to open branches in Jefferson City and Fulton. State-chartered banks would not be allowed to branch in that manner under Missouri's law which

restricts branching by commercial banks to the same county as their main office, and to the adjoining county if certain conditions are met. The OCC cited Missouri's law giving broader branching authority to S&Ls which may offer many of the same products and services as commercial banks in the state.

Similar decisions by the OCC (see the Fall 1988, FDIC Banking Review, pp. 42-43) have been upheld by the U.S. Supreme Court in the Deposit Guaranty case (Mississippi) and by federal district courts in Florida, Tennessee and Texas. Several states, including Arkansas, Florida and Texas have expanded banks' branching authority to avoid putting state-chartered banks at a competitive disadvantage.

The Independent Bankers Association of America has sued the OCC to block the FNB&T branching order. *BBR*, 2/6/89, p. 341.

Wisconsin: The Comptroller of the Currency allowed two national banks to open branches in locations where state-chartered banks would not be allowed to branch. The OCC said that because Wisconsinchartered S&Ls are permitted to offer many of the same products and services offered by commercial banks, they are "state banks" for purposes of the McFadden Act. Wisconsin's law permits state-chartered S&Ls to branch statewide. *ABA Bankers Weekly, 4/18/89, p. 6.*

Title Insurance And Related Activities

The OCC said that national banks may act as agents in the sale of title insurance, and, in addition, may conduct title searches, write legal title opinions, and survey land in connection with real-estate loans. An official said a 1972 court decision permits national banks to engage in activities that are "convenient or useful in the performance of one of the bank's established activities pursuant to its express powers." In 1987, national banks were authorized by the OCC to sell title insurance as an activity "incidental to the business of banking." *BBR*, 11/14/88, p. 844.

Software Subsidiaries

The OCC permitted Mellon Bank N.A. to establish a subsidiary to offer software applications and systems for financial institutions' backroom operations. National banks already are permitted to provide data processing for services "expressly or incidentally authorized to national banks." The OCC's Mellon ruling differs from its denial in 1984 of a bank's request "to market software separately as a by-product of its other data processing activities," because in this case the subsidiary "will be selling software on a stand-alone basis only to other financial institutions." BBR, 11/14/88, p. 844.

Credit Card Fees

The OCC said the fees that national banks can charge for their credit cards are determined by the bank's, not the customer's, address. The letter to Iowa's Attorney General said that national banks based in other states did not have to comply with fee guidelines established under Iowa's laws. *ABA Bankers Weekly*, 1/10/89, p. 4.

Guidebook On Community Development Lending

The OCC released a 34-page report on methods and organizational models used by banks and other financial institutions to help facilitate community revitalization. *Community Development Finance: Tools and Techniques For National Banks, OCC, March 1989.*

Federal Home Loan Bank Board

Risk-Based Capital Requirement Proposal

The FHLBB proposed a regulation that would base the minimum capital required of a S&L on its risk level. For the credit-risk component of the minimum capital requirement, each asset would be assigned one of six risk categories.

The proposal would require all FSLIC-insured thrifts to maintain capital of six percent of risk-weighted assets, plus 50 percent of the potential change in market value of the assets that would be caused by a two percent change in interest rates. Together the six percent credit-risk component and the 50 percent change in value interest-rate-risk component are expected to average approximately eight percent of riskweighted thrift industry assets. Assets held by thrift subsidiaries would be subject to the capital requirement. With respect to collateralized borrowing, additional capital equal to three percent of the liabilities against which specific assets are pledged would have to be held.

A four-year phase-in period is provided before thrift institutions would have to be in full compliance.

In conjunction with its capital proposal the FHLBB also raised the issue of whether the final regulation should define a particular level of regulatory capital (1.5 percent of assets) as an "unsafe and unsound condition to transact business" for purposes of triggering the FHLBB's statutory authority to appoint a conservator or receiver for the institution. *News, FHLBB, 12/19/88; FR, 1/10/89, p. 826.*

Restrictions On Rate Sensitivity

New FHLBB guidelines require all savings institutions' boards of directors to adopt a formal interest-raterisk policy containing specific elements. These include explicit limits on the institution's interestrate-risk exposure, in terms of the maximum acceptable potential reduction in net interest income and market value of portfolio equity caused by hypothetical increases or decreases in interest rates of up to four percent.

Management reports to the directors should include an analysis of how the institution's net interest income and portfolio equity would be affected by the hypothetical interestrate changes. Most institutions will be permitted to rely on the estimate of those measures calculated by the Federal Home Loan Bank System. Institutions with assets of more than \$500 million, those investing in highrisk mortgage derivative products, and other institutions designated by regulatory staff should generate their own exposure measures.

Institutions generally will be expected to amend their current interest-rate-risk policy by June 30, 1989 to meet the guidelines and to implement their revised interest-rate-risk management improvements by December 31, 1989. *News, FHLBB, 1/30/89.*

Derivative Mortgage Securities Activity Guidelines

The FHLBB issued mortgage securities guidelines under which troubled savings institutions insured by the FSLIC must have special permission from their principal supervisory agent in order to hold certain mortgage derivative securities or mortgage swaps. Healthy institutions may engage in transactions involving these securities "only after putting in place internal controls and procedures specified . . ."(in the guidelines). The instruments include the residual interest in collateralized mortgage obligations (CMOs) and real-estate mortgage investment conduits (REMICs), and other specified derivative products with high-risk characteristics.

"In general the use of these products should be limited to transactions and strategies that do not increase an institution's exposure to interest rate risk," an agency official said. *Thrift Bulletin TB-12, FHLBB; BBR,* 12/19/88, p. 1022.

Insolvent Thrifts' Investment In High-Risk Securities

The FHLBB issued guidelines that prohibit insolvent S&Ls from new investments in high-risk, or so-called junk bonds. The guidelines also require those S&Ls to divest their current investments in such securities unless an association's FHLBB supervisor permits them as being in the best short-term interests of the FSLIC.

At present, thrifts' investment in high-risk bonds is restricted to 11 percent of their total investments, and to five percent of total assets in any one high-risk mutual fund. *WSJ*, 2/1/89, p. A8.

Thrifts To Be Told Examination Ratings

The FHLBB, in a change of policy, will tell thrift institutions the overall numerical value of their MACRO ratings, starting with examinations begun after December 1, 1988. Management, asset quality, capital adequacy, risk management, and operating results are rated separately on a scale of one (highest) to five, and the results combined into a oneto-five composite rating. Institutions will not be permitted to disclose their ratings "in any form" to the public. *BBR*, 12/12/88, p. 968.

Disclosure Of Customer Information

Federally chartered savings institutions would be permitted to release the names and addresses, but not account information, of their customers to any party, unless the customer forbids it "affirmatively and in writing," under the proposal released for comment by the FHLBB. A customer list released under the proposed rule would have to be a complete list of all customers not objecting to the release. For example, a list of only customers having an account balance over a specified amount would not be permitted. Thrifts would be required to notify customers "in a timely manner" of the institution's intent to release the information, and to delay the release of information for 30 days following the customer notification.

The proposal would also amend current regulations that require an association, before it releases customer information, to have approval from the FHLBB or the thrift's principal supervisory agent. *BBR*, 2/13/89, p. 381; FR, 2/6, p. 5629.

Guidance To S&Ls On Environmental Liability

A statement by the FHLBB identified potential environmental liabilities for S&Ls, and urged them to adopt environmental-risk policies. A good environmental-risk policy. the FHLBB said, should establish a due diligence level for all real-estate transactions, establish a means for identifying environmental risk, and minimize contamination of collateral by providing for monitoring and property inspections. The policy should be sufficient to qualify for the "innocent landowner" defense under federal environmental law, and "support the institution's adherence to the principles of safety and soundness."

An official said there is no requirement, nor a time frame specified, for S&Ls to adopt the FHLBB's suggested guidelines. However, thrift examiners will comment adversely if an institution has taken no action to protect against environmental liability. *BBR*, 4/3/89, p. 782.

Federal Financial Institutions Examination Council

Interest-Rate Swap Reporting

The FFIEC issued for public comment a proposal, developed jointly by the OCC, the FRB and the FDIC, that would prohibit FDIC-insured commercial banks and statechartered savings banks from recognizing, for purposes of the Reports of Condition and Income (Call Reports), arrangement fees and spread income at the inception of a swap. Instead, this income would be recognized over the life of the swap. It also would require that subsequent changes in the market value of swaps, except for most swaps accounted for as hedges, be reflected in

income during the period in which the changes occur. *FR*, 11/9/88, *p*. 45386.

Risks From Large-Scale Integrated Financial Software Systems

The FFIEC notified all federally supervised financial institutions of concerns about the risks associated with large-scale integrated financial software systems. Institutions were alerted to the potential risks of these systems and the possible controls appropriate for their development, implementation and use. *BL-35-88, 12/5, FDIC.*

National Credit Union Administration

Proposed Tighter Membership Rules

The NCUA proposed chartering regulations and a membership policy that would discourage the creation of national credit unions, such as the CU formed last year by the 28 million-member American Association of Retired Persons. To meet the common bond requirements, under the proposal a CU must have at least one meeting annually open to all members, sponsor other activities providing for regular contact among members, and provide a definition of who is eligible for membership. A charter would have to be based at the "lowest economically feasible level," as between a local, regional or national charter. Before a regional or national charter could be granted all the regional directors involved would have to give approval. ABA Bankers Weekly, 3/28/89, p. 4.

CU Nonmember Deposits Limited

Credit unions may not have more than 20 percent of their total shares in nonmember accounts under an emergency rule adopted by the NCUA. The rule applies to federally insured state and federal CUs that are authorized to accept public-unit and nonmember funds. An NCUA memorandum said that "recent problem cases have shown that these types of accounts, when they represent a large portion of total shares, lead to unsafe and unsound practices and conditions in the credit unions accepting them and have resulted in significant losses to the NCUSIF and some credit unions." *BBR*, 12/19/88, p. 1024; FR, 12/19, p. 50918.

Federal Credit Unions Permitted To Buy Put Options

The NCUA amended its rules to permit federal CUs to purchase put options on Government National Mortgage Association, Federal National Mortgage Association, and Federal Home Loan Mortgage Corporation securities. It enables CUs to offer locked-in interest rates when home mortgage applications are filed and be protected against increases in market rates which may occur before the loan is sold on the secondary market.

An interim amendment required credit unions to obtain approval from the appropriate NCUA regional office before starting a put-option program, and subsequent monthly reports on such activities. The final rule gives NCUA regional directors the option of waiving the monthly reporting requirement on a case-by-case basis. *BBR*, 5/1/89, p. 951.

State Legislation And Regulations

Interstate Banking And S&L Operations

Illinois: New legislation, effective September 16, 1988, permits a state bank, when necessary for the protection of its depositors, to sell its assets to a qualified midwest or out-of-state BHC. This may be necessary when no qualified state or national bank located in the same county, surrounding counties or state will purchase the assets. *ELSS*, 12/2/88.

New Jersey: The Banking Commission said that acquisitions of federal-

ly insured S&Ls and their holding companies in New Jersey by out-ofstate thrifts would be permitted on a nationwide, reciprocal basis, effective November 15. The Commission's action was triggered by the 1987 interstate banking law's provision for such acquisitions when 13 other states had enacted a similar law.

New Jersey's commercial banks were authorized two years ago to engage in nationwide reciprocal interstate banking. *BBR*, 11/28/88, p. 905.

New Mexico: New legislation permits the acquisition of savings institutions and holding companies of savings institutions by out-of-state depository institutions and holding companies, effective January 1, 1989. Until July 1, 1992, an institution to be acquired must have been in operation for at least five years. *ELSS, 4/25/89.*

Intrastate Branching

Florida: Regulators granted approval for the Bank of Central Florida, Orlando, to establish a branch in Seminole County. The state Comptroller was given authority to approve cross-county banking by 1988 legislation that became effective 45 days after the establishment of the first national bank branch outside the bank's home county. The OCC in May allowed Consolidated Bank, N.A., based in Dade County, to establish a branch in neighboring Palm Beach County, and since has approved 11 more cross-county branches for national banks. BBR, 12/5/88, p. 948.

Illinois: A state judge ruled that the state Banking Commissioner may no longer approve purchases by state-chartered banks of inactive bank charters. State banks had been buying charters of closed or merged banks, then reopening them at different locations to get around the state's restrictive branching rules. Illinois state banks may relocate anywhere within the state, while national banks under federal law are restricted to relocating within 30 miles of their original main office. *BBR*, 2/6/89, p. 323.

Another circuit judge in Illinois has ruled that the Banking Commissioner's policy of permitting the purchase and reactivation of charters is legal. *BBR*, 2/27/89, p. 492.

Montana: Beginning January 1, 1990, banks in the state are permitted to branch by acquiring other banks and converting them to branches, or by establishing a branch in a town that has no bank.

The three out-of-state companies which already own banks in Montana are not permitted to branch, but under the new law may merge their banks into one company and convert the remaining offices into branches. They are not permitted to buy additional banks in Montana. *AB*, *3/30/89*, *p. 15*.

Insurance Powers

California: The California Supreme Court upheld Proposition 103, which was approved by the state's voters last year. The decision allows rollbacks in insurance rates, provided that insurers are not deprived of due process or forced to accept "inadequate" profit. *WSJ*, 5/5/89, p. B1.

The initiative also gives statechartered banks the right to sell insurance products. It requires that the state's Insurance Commissioner be elected, rather than appointed by the Governor, and provides that future rate increases are subject to the Commissioner's approval.

The measure repeals the insurance industry's exemption from state antitrust laws, applies consumer protection laws to insurance sales, and repeals anticompetitive laws that prohibit insurance agents and brokers from giving discounts to consumers. *AB*, 11/10/88, p. 2; WSJ, 11/10, p. B1.

The California Supreme Court earlier granted an emergency stay preventing Proposition 103 from taking effect, which it later lifted except for the provision requiring (1) a minimum 20 percent rollback in property and casualty rates, and (2) setting up a publicly funded consumer watchdog agency. *WSJ*, 11/11/88, p. B7; 12/8, p. B10.

The California Department of Insurance granted approvals for a subsidiary of Security Pacific Corp., and First Interstate Bank of California, to begin selling insurance products. *AB*, *1/31/89*, *p. 12; WSJ, 2/31, p. B3.*

Securities Underwriting Powers Of Banks, Thrifts Expanded

Georgia: The Governor is expected to sign legislation, to take effect July 1, which will allow banks to invest 25 percent of equity in real estate they finance, though the total of such ownership could not exceed 60 percent of a bank's capital. Also, the bill broadens the authority of banks to invest in corporate debt securities, and clarifies their authority to invest in mutual funds composed of debt securities. The banks still would not be allowed to buy mutual funds consisting of stocks or buy stocks directly.

An official said the legislation would give state regulators broad authority to consider new financialservice powers for banks by regulation and avoid the lengthy legislative process. *BBR*, 4/10/89, p. 820.

Pennsylvania: Effective January 22, 1989, commercial and savings banks may underwrite municipal and mortgage-backed securities and invest up to one percent of their assets in real-estate development, and make investments in new areas to be outlined by the state banking department. This is one of three new laws that will "allow those state-chartered institutions to offer more services and become more competitive," and will "provide a more level playing field," Governor Robert Casey said. *BBR*, 1/9/89, p. 77.

Utah: Recently enacted legislation allows state-chartered banks, begin-

ning April 24, to underwrite and sell short-term money market funds, short-term municipal debt and corporate commercial paper through a subsidiary. The law limits a holding company's investment in the subsidiary to ten percent of its capital, and requires the subsidiary's employees to register with federal and state authorities. *Bank Letter*, *3/20/89, p. 8.*

Parity Powers For Savings Banks

Vermont: New legislation grants trust powers to state-chartered savings banks and clarifies that savings banks have parity of powers with commercial banks. *ELSS*, 4/25/89.

Lender Liability Restrictions

California: New banking legislation provides that a commercial loan of more than \$100,000, in order to be considered a valid contract, must be agreed upon in writing. The law is intended to prevent borrowers from suing banks based on oral statements made during the negotiation process. Commercial loans, as defined in the law, do not include some small-business credits, for example, loans secured by an entrepreneur's home. Effective date is January 1, 1990. *AB*, 5/16/89, p. 2.

Kansas: A new law, effective January 1, 1989, bars bank customer lawsuits, the Kansas Bankers Association said, "for failing to carry out a particular promise relating to extension of credit or a financial accomodation unless that promise was specifically in writing and signed by both parties." The law will afford protection to the state's banks in that "it virtually eliminates lender liability lawsuits based on the bank's failure to carry out an alleged oral agreement." The law requires that loan agreements include "a clear, conspicuous and printed notice to the debtor that states that the written agreement is a final expression" of the loan agreement. BBR, 11/28/88, p. 918.

State Regulator Gets Stronger Thrift Take-Over Powers

California: The Governor signed legislation which authorizes the state's commissioner of savings and loans to seize without prior hearings or examinations and place into conservatorship for up to one year any institution under his jurisdiction which is engaging in unsafe or unsound practices. The new law permits the commissioner to take over institutions before they become insolvent more quickly than under the prior law. The state department of banking already has similar powers with respect to state-chartered banks. BBR. 5/1/89. p. 953.

Eligibility To Hold Public Deposits

Indiana: A new law provides that a financial institution is ineligible to become a depository of public funds and, if already a depository, will have its eligibility revoked, if the institution's most recent statement of condition shows a ratio of total capital to total assets of less than three percent. *ELSS*, 4/25/89.

New Fees Permitted On Credit Cards

New York: New legislation permits the state's banks to impose certain charges on credit cards and consumer credit accounts. As a result, the banks will be on a more equal footing with institutions in states like Delaware and South Dakota, into which a number of large New York City banks have already moved their credit card operations.

The new law, which sunsets on June 30, 1993, permits credit card issuers and other lenders to charge a fee when customers exceed their credit limits. The charges must be disclosed. Also, a late fee may be charged if a customer's payment is more than ten days overdue. Previously, the late fee could be charged on cash advances and other loans but not on purchases. *BBR*, 5/1/89, p. 954.

Miscellaneous

President's S&L Plan

President Bush in early February released a plan calling for the separation of the FSLIC from the FHLBB, and placing it under the administration of the FDIC. The two deposit insurance funds would be maintained separately. The FHLBB would be replaced by a single Chairman, subject to oversight by the Treasury Department. The twelve regional Federal Home Loan Banks would be maintained.

The status of S&Ls that are already insolvent would be resolved by a newly created "resolution trust corporation," which would have an oversight board consisting of the Secretary of the Treasury, the Chairman of the FRB, and the U.S. Comptroller General. A separate funding corporation would be created.

By June 1, 1991, S&Ls would have to meet the capital requirements that apply to FDIC-insured banks. Regulators would have greater authority to impose penalties on bank and thrift managements. *AB*, 2/7/89, p. 19.

Risk-Based Capital Guidelines

The risk-based standards developed by the Basle Committee, and approved recently by the central banks of the Group of 10 countries, are likely to have fundamental effects on the way banks operate, particularly in regard to lending, according to this article.

A survey of capital-allocation mechanisms among major U.S., U.K. and Canadian banks found that while institutions differ considerably in the extent to which they now use riskbased capital allocation, 80 percent think such allocation will become an increasingly important management tool. Growing numbers of banks are planning to use return on riskadjusted capital to measure businessunit profitability. At present, few banks carry capital allocation below the divisional level, or apply it to business lines. While most capital allocations are performed according to regulatory requirements, banks are slowly beginning to use return on capital or risk-adjusted return on capital as a method of performance measurement. Institutions are cautioned, however, against completely adopting the G-10 framework for their own internal performance measures.

The article concludes that bank management must consider the relative risk when comparing returns in different business areas (and differential allocation of capital is one method of ensuring this) if resources are to be allocated effectively and shareholder returns maximized over the longer term. *Issues in Bank Regulation, Fall 1988, pp. 5-7.*

Appeals Court Vacates Decision In AMBAC Case

A three-judge panel of the U.S. Court of Appeals for the District of Columbia vacated a portion of its earlier decision in the case of the American Municipal Bond Assurance Corp (AMBAC). The Court had ruled in August 1988 that the FRB has approval authority over applications by a bank within a holding company to establish or acquire a subsidiary. The case arose from the OCC's approval in 1985 for Citicorp to own AMBAC, a municipal bond insurance company. *AB*, 9/23/88, p. 2; 1/9/89, p. 1; *BBR*, 1/16, p. 126.

Court Bars Banks' Sale Of Investment Certificates

A federal district court decided against Security Pacific National Bank and the OCC on the bank's issue of investment certificates backed by pools of its residential mortgages. The court noted that a trustee services the certificates, and thus the activity is underwriting securities in violation of the Glass-Steagall Act of 1933.

The court decision affects only securities issued by banks and not those underwritten by separate securities affiliates. Under a FRB rule, which was upheld by the U.S. Supreme Court in June 1988, the securities affiliates of BHCs are allowed to engage in underwriting certain securities, including those backed by consumer receivables. However, not more than five percent of an affiliate's revenues can come from socalled "ineligible" securities, while under a ruling by the OCC in June 1987, banks are not limited on the amount of asset-backed certificates they may issue.

The court ruling also affects a number of other banks that have issued similar certificates. WSJ, 12/20/88, p. C19.

Leveraged Buyouts

A survey of ten big banks found that as of November, 1988 they held a total of about \$19 billion in senior debt for leveraged buyouts and have sold many times that amount to investors. Holdings amount to about 20 percent of total volume for several of the banks, and less for some others. Buyout loans are attractive to institutions because of the large fees they earn from assisting in this financing. LBOs, for purposes of this survey, include all highly leveraged transactions that have been funded, where generally the borrower's equity represents ten percent or less of the acquired company's capitalization.

Buyout portfolios generally represent a far smaller portion of the banks' total loan portfolios than other categories, such as loans to developing countries, which total about \$55 billion at the ten big banks. WSJ, 12/13/88, p. A3.

FDIC Reports Net Loss In 1988

The FDIC experienced a net operating loss of \$4.2 billion in 1988, the first yearly loss in the FDIC's history. At the end of 1988 the deposit insurance fund stood at \$14.1 billion, down 23 percent from yearend 1987. During 1988 the FDIC handled 221 bank failures, including 200 closings and 21 assistance transactions, compared to 184 closings and 19 assistance transactions during 1987. *PR-51-89*, *3/14*.

Commercial Banks Report Record Profits In 1988

Commercial banks earned a record \$25.3 billion in 1988, up from \$2.8 billion in 1987, and exceeding the previous high of \$18.1 billion in 1985.

Provision for loan losses largely accounted for last year's improvement. Total provision by commercial banks was \$20.9 billion less than in 1987. However, the coverage of banks' nonperforming loans and leases by loss reserves rose, to 82.6 percent at the end of 1988 from 78.0 percent a year earlier.

Some of the improvements in 1988 in banks' financial performance are attributable to the resolution of failed-bank cases. The closing of the banks of First RepublicBank Corporation in July resulted in the removal of \$2.3 billion in pre-failure losses from industry aggregates, and a \$1.4 billion net addition of equity capital. The FDIC Quarterly Banking Profile, Fourth Quarter, 1988.

Thrift Losses Set Record In 1988

The thrift industry lost a record \$12.1 billion in 1988, according to the FHLBB. The previous record loss was \$7.8 billion in 1987. Industry losses in the fourth quarter were \$2.3 billion, up from \$1.8 billion in the previous quarter. About \$1.3 billion of the fourth-quarter loss was attributed to 77 insolvent thrifts in Texas.

Analysts said the industry loss figure for 1988 reported by the FHLBB may be too low because it does not include fourth-quarter interest expenses or other losses in insolvent thrifts that were merged or liquidated. *AB*, 3/22/89, *p. 1*.

Withdrawals Of Deposits In S&Ls At Record Level Early In Year

Net withdrawals from deposit accounts in S&Ls were \$9.3 billion in February, following a record \$10.7 billion in January, the FHLBB reported. An official said the deposit losses were being caused primarily by the higher rates being offered by money market mutual funds.

Most of the withdrawals were from retail accounts of \$100,000 or less, and withdrawals from thrifts in the Southwest have accounted for about 30 percent of the total. Reportedly many of the insolvent thrifts in the Southwest were not raising their deposit interest rates to competitive levels because of being under regulatory directives to reduce their deposit base because of insufficient capital. WSJ, 3/15/89, p. A3; AB, 3/15. p. 1.

Withdrawals from S&Ls exceeded new deposits (not including interest credited) by \$8.5 billion in March, bringing the net withdrawals to \$28.5 billion in the first quarter. A FHLBB official said that, except for a few instances, there is no evidence that the outflows reflect a loss of confidence by depositors. About \$5 billion of March's net outflow occurred in 20 thrifts-located mostly in the Southwest and West. Money market mutual funds in March paid an average rate of more than one percentage point above rates paid by S&Ls on three-month certificates of deposit. WSJ, 5/12/89, p. A8.

Costs To FSLIC Of Assisted Acquisitions Versus Liquidations

A study commissioned by the FHLBB found that the total costs of FSLIC-assisted acquisitions in as many as 24 cases last year were underestimated. The tax benefits, for example, involved in these transactions improved the agency's net revenues but were actually intragovernment transfers. In addition, the report said, because the FSLIC often offers bidders different forms of assistance, it could not always be certain of obtaining the lowest bid for a failed thrift. The report found no evidence that deals which the FSLIC completed in December 1988, or those transacted in Texas, were more costly than the agency's other deals.

A Government Accounting Office report concluded that because of the tax benefits the costs of assisted acquisitions may have exceeded what the costs of liquidation would have been in one-third of the FHLBB's sales of insolvent thrifts last year. Also, questions were raised about the adequacy of procedures for handling bids. The report found that the new thrifts are "thinly capitalized," and "there is a lack of sufficient incentives for the new thrifts to effectively manage and liquidate the guaranteed assets" to minimize the government's assistance costs. AB, 3/10/89, p. 3; 3/15, p. 2.

Borrower Bankruptcy Costly To Banks

Commercial banks are paid an average of only 78 percent of what they are owed when a company goes bankrupt, according to a study. Only one bank in three is paid in full. The analysis included 38 bankrupt companies with claims averaging \$275 million.

The claims of several groups, including lawyers and accountants whose fees were incurred after the bankruptcy filing, employees and governments, and small unsecured claims, all of which receive some of any assets before the banks, averaged 13.5 percent of the total distributions. While banks received only 14 percent of their distributions in cash, creditors as a whole received 44 percent in cash. The time from filing the bankruptcy to the disbursement of assets averaged two years.

In 1987 there were over 61,000 business failures, up 17 percent from 1984. The liabilities of those companies totaled \$36.3 billion. *AB*, 11/1/88, p. 10.

Trends In Banking Structure

Since the mid-1970s the number of banking organizations has declined considerably, while the share of banking assets controlled by the largest banking organizations (100 largest) has risen substantially. The

changes in banking structure, this article says, have been made possible by recently enacted legislation, principally in those states allowing organizations to expand geographically. Legislative and regulatory changes have facilitated mergers and acquisitions among banking organizations located in the same geographic area. During the 1980s the implementation of the antitrust laws changed with the passage of legislation that reduced the difference between commercial banks and nonbank financial firms.

Decreases nationally in the number of banking organizations and increases in banking concentration have occurred primarily because of the growth of very large regional and superregional BHCs, often through mergers or acquisitions. The changes in regional and state concentration have varied, with the Northeast and Southeast having the greatest increases. Concentration in local banking markets decreased slightly over the 1976-82 period, with smaller increases occurring since then. Greater competition for banks from thrift institutions and other firms and the lack of any substantial increase in concentration at the local level should mitigate antitrust concerns raised by structural changes, the article concludes. Federal Reserve Bulletin, March 1989, pp. 120-133.

Commercial Banks And Investment Banking

This article discusses commercial banks' investment banking activities, analyzing the profitability of permissible as well as currently prohibited activities. The principal areas of investment banking included are the underwriting of municipal bonds and other securities, private placements, merger and acquisition advisory services, and overseas investment banking operations.

It is concluded that bank expansion and profitability in these areas will be limited generally by the huge start-up costs, and in some instances the level of capitalization required. Thus, it is quite possible that only a handful of the nation's commercial banks will be able to establish significant investment banking operations. Moreover, banks' entry into currently proscribed activities could be expected to reduce spreads somewhat.

While investment banking divisions at large commercial banks have operated for less than ten years, these banks already have some of the necessary ingredients to succeed. For most, this expansion has contributed only marginally to profitability. Banks that have developed a strong presence have done so in specific market niches, largely because they developed strategies that reflected their existing customer base and areas of expertise. Economic Perspectives, Federal Reserve Bank of Chicago, November/December 1988, pp. 3-13.

Market Discipline, Bank Risk And SNDs

This study analyzes the potential for subordinated notes and debentures (SNDs) to impose market discipline in regulating bank risk, and whether such SND-imposed discipline is consistent with bank regulatory agency objectives. The SND potential for market discipline is examined on the basis of the interest-rate spread between SNDs and comparable Treasury securities. It focuses on the 100 largest U.S. BHCs, as all of these institutions have publicly traded SNDs. The spread, or default-risk premium, is modeled as a function of various balance-sheet measures of risk, bond ratings, and an index proposed by the FDIC for the pricing of risk-based deposit insurance.

The study finds that SND risk premiums are weakly related to Moody's and Standard and Poor's ratings, but uncorrelated with the FDIC Index and any balance-sheet variables. Also, the FDIC Index is found to be negatively related to the public bond ratings. It is concluded that in the current environment, the impact of the cost of SNDs on bank risk-taking behavior is unlikely to coincide with the directions desired by bank regulators. Journal of Money, Credit and Banking, November 1988, p. 597-610.

Reforming Deposit Insurance

In this article a fail-proof banking system is discussed that would break the link between banks' deposit functions and their risk-taking activities. Banks' investments would be restricted to short-term, riskless, or near-riskless assets, such as Treasury bills. Their risk-taking activities would be shifted to the nonbanking subsidiaries of the parent holding companies. The capital requirement on these banks could be greatly reduced. They would retain federal deposit insurance, and the Federal Reserve Banks would continue as "last resort" lenders to them, further enhancing the safety of the institutions. Regulation of the banking system could be greatly reduced. At the same time, the nonbank subsidiaries would be better positioned to expand into new financial activities. Transactions between bank affiliates and nonbank affiliates would have to be severely restricted.

The fail-proof banks should be viable institutions. Because they would be the only institutions allowed to have federal deposit insurance, and full payment transactions, they should be able to retain most of their existing deposit business. Given their low-yield asset portfolio the banks would probably lose some largeinvestor CD deposits. Their operating costs, however, would be relatively low.

To accommodate the greatly increased need for high-grade, shortterm investments in the financial system, the Treasury could make some alterations in the maturity structure of the federal debt, substituting shorter-term for longerterm debt. A "more controversial" proposal is to allow the fail-proof banks to hold short-term debt instruments of blue-chip firms as well as Treasury securities. *Issues in Bank Regulation, Fall 1988, pp. 20-24.* A staff study of the Federal Reserve Bank of Minneapolis argues for reforming the deposit insurance system through higher capital requirements, and co-insurance, in which banking risk would be shared by the depositors. Alternate proposals for reform, including "narrow" banking, closing banks before they fail, and risk-adjusted insurance premiums, are discussed. In the writers' view, for any of these alternatives the costs or other problems would be likely to outweigh their benefits.

Under co-insurance, there could be 100 percent deposit insurance up to, say, \$10,000 per depositor (not account), and partial protection for larger deposit balances. The system would be phased in, with the unprotected portion starting, for example, at two percent and increasing by a percent or so each year after that. The writers do not suggest how large the fractional co-insurance burden of depositors should ultimately become. Annual Report 1988, Federal Reserve Bank of Minneapolis, pp. 3-16.

Community Bank Regulatory Burden

A former official of the Federal Reserve Bank of Minneapolis finds that while no single regulation presents an unmanageable burden for community banks, the cumulative effect of the laws and regulations is very great and may affect the ability of small banks to compete.

Community banks are placed at a disadvantage in some cases by economies of scale in regulatory compliance. The use of complex legal language, and an apparent reluctance on the part of the agencies to provide interpretations and compliance guidelines, worsen the situation. The burden of regulatory change also is high. Changes in format of the quarterly Call Reports make it impossible for many banks to handle the function internally. Major changes can cause difficulty even when the purpose of the change is to ease compliance. The regulatory push for increased formality, such as the requirements in some cases for formalized organization structures, and putting bank policies into writing, can be a significant burden on small banks. Aside from the development and implementation costs involved, there is also the danger that formality will deprive community banks of their natural adof flexibility vantages and responsiveness.

The author finds inadequate the Regulatory Flexibility Act, which requires that agencies analyze the impact of each rulemaking on smaller institutions from a cost-benefit perspective unless the agency head finds that the impact will be insignificant. The Act does not deal with the cumulative effects of the body of regulations, and also it applies only to formal rulemakings, not to informal policies (for example, the formal written policies requirement) and minor changes in rules. *Illinois Banker*, *November 1988, pp. 16-18*.

Banks' LDC Debt Exposure Declines

Banks were able to make considerable reductions in their lessdeveloped-country debt in 1988, according to a study. Fifty of the nation's largest BHCs reduced their LDC debt exposure by 14.3 percent. Their average exposure is now 25 percent of equity, and 23 companies have net exposure of less than five percent. Several large money-center institutions still have exposure well in excess of equity. *Bank Letter*, 4/24/89, p. 2.

Report Says Federal Rules Permit Foreign Debt Restructuring

A report to Congress by the FRB, the FDIC and the OCC says, "The regulatory agencies under existing statutes have permitted banking organizations to exercise a wide range of options to negotiate reductions in the debt of foreign borrowers, while maintaining basic regulatory principles regarding safety and soundness. Policies have been adopted to facilitate the conversion of outstanding bank debt into equity interests in foreign countries. Recently published estimates by the World Bank indicate that more than \$20 billion face value of commercial bank debt was eliminated in the last two years (1987-88) through debt settlements and conversions."

Over the past several years, banks have significantly increased their capital relative to developing-country debt exposure, and "are now much stronger financially in relation to this problem," the report states. However, the exposure is still high in relation to equity capital, particularly for the ten largest U.S. banking institutions. *BBR*, 3/6/89, p. 600.

Home Equity Lines Increase

The amount of approved home equity lines of credit in banks with \$100 million or more in assets increased by 57 percent in 1988, according to the Consumers Bankers Association. The average amount outstanding of HELCs rose to \$24,710 at year-end 1988 from \$21,989 a year earlier, representing 65 percent and 67 percent, respectively, of the maximum credit lines approved. HELC payment delinquencies rose in 1988, reflecting the maturation of the product, but remained well below those of all other types of consumer credit, the report said.

Ninety-eight percent of HELCs had a variable interest rate, and 27 percent allowed conversion of a credit line to a fixed rate at the borrower's option. *Bank Letter*, 5/8/89, p.8.

Banks Find Analysis Techniques Deficient

A survey of 61 large commercial banks found that only five percent were satisfied with their current ability to calculate return-on-equity by line of business. Just three percent expressed satisfaction with how resources for growth are allocated per business unit. The findings suggest a limited ability to allocate capital so that returns and stock price are maximized. Only seven percent of the institutions said their current risk-assessment techniques were satisfactory, and 50 percent said the need to improve those techniques were critical or very important. *Bank Letter*, 3/13/89, p. 2.

ATMs

Four major electronic banking systems—Most, Honor, Relay, and Avail—operating in the Southeast are expected to consolidate before midyear, creating a network of more than 8,500 automated teller machines over a 13-state area. About 1,000 financial institutions with 16 million cardholding customers will share the system. In numbers of ATMs the new system would be the largest regional ATM network in the U.S., surpassing New York Cash Exchange, which has 7,400, the California-based Star System, now ranking second with about 7,200, and Mac, owned by Philadelphia National Bank, with 5,500 ATMs in seven states. *AB*, 1/10/89, p. 1.

Check Volume Will Peak In 1992, Study Says

About 51 billion checks were written on deposit accounts in the U.S. in 1988, and the number is expected to increase each year through 1992, according to a recent study. The growth rate in numbers of checks will peak in 1990 at 4.2 percent, up from 3.8 percent in 1988 and 3.4 percent in 1987. After 1992 the absolute number of checks written is expected to decline, falling to 48.3 billion in the year 2000. Checks written by consumers will peak at 30 billion in 1994, up from 28 billion in 1988, when consumers wrote checks to cover about 55 percent of their personal expenditures.

It is noted that previous studies have tended to overestimate the impact of alternatives to checks, such as automated clearing houses, automated teller machines, and point-of-sale systems in reducing total check volume in the near term. *AB*, 2/22/89, p. 2.