Commentary & Debate

The Economics of Deposit Insurance: A Critical Evaluation of Proposed Reforms

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In The Role of Deposit Insurance in the Emerging Financial Services Industry,1 Chairman William M. Isaac of the Federal Deposit Insurance Corporation (FDIC) suggests that major reform of the federal depository insurance system is necessary to assure sound banking practices in a period of widespread deregulation of financial markets.2 Isaac identifies three recent changes in the financial services industry which have created a need to re-evaluate the role of deposit insurance: expansion of the product lines which banks are allowed to offer, partial removal of constraints on interstate banking, and gradual elimination of interest rate ceilings on bank deposits.3 We agree with Isaac that these changes present a serious challenge to the present system of financial services regulation;4 we disagree, however, with his proposed reforms.

Isaac suggests three major reforms of the present system to respond to the additional risks posed by deregulation: (1) risk-adjusted deposit insurance premiums, (2) a systematic policy of partial nonpayment of uninsured deposits and (3) additional financial disclosure.5 Ostensibly, risk-adjusted premiums would discourage banks from knowingly undertaking activity marked by excessive risk, because a higher premium would in-

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2. Id. at 206-13.
3. Id. at 198, 204-06.
4. Banking operations may indeed be exposed to additional sources of risk if they are permitted to expand into new product lines without additional supervision. Geographic deregulation could further increase competitive pressure within the industry, temporarily raising the risk of bank failures as inefficient firms are exposed. Finally, the removal of interest rate ceilings on bank deposits may increase a bank’s operating costs, posing an additional threat to bank earnings.
5. Id. at 207-11.

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crease the marginal cost of such risk-taking.\textsuperscript{6} Partial non-payment of un-
insured deposits and additional disclosure are intended to strengthen mar-
ket discipline of bank risk-taking by making the cost of borrowed funds a function of risk.\textsuperscript{7}

This Comment argues that the three reforms advocated by Isaac are
neither necessary nor desirable. Indeed, implementing all three reforms
simultaneously could seriously destabilize financial markets. Section I
presents a brief overview of the present system of deposit insurance, em-
phasizing its relationship to other safety mechanisms in the financial regu-
laratory structure which may mitigate the need for extensive reform of the
deposit insurance system. Section II argues that Isaac's fundamental pre-
mise—that deregulation will permanently increase the riskiness of insured
institutions—may be wrong and that, on the contrary, deregulation even-
tually may reduce the risk of failure. Section III discusses particular
problems posed by the FDIC's suggested reforms, including the problems
raised by likely market responses. Finally, Section IV examines several
alternatives to the FDIC's proposals.

I. An Overview of the Present System

The major justification for a deposit insurance system operated by the
federal government\textsuperscript{8} rests on macroeconomic grounds:\textsuperscript{9} Deposit insurance
acts as a stabilizer by preventing bank runs and the dangerous reduction
in the nation's money supply that large-scale bank failures can cause.\textsuperscript{10} In

\begin{itemize}
    \item \textsuperscript{6} Id. at 207-08.
    \item \textsuperscript{7} Id. at 208-11.
    \item \textsuperscript{8} Federal deposit insurance was introduced in the United States with the enactment of the Bank-
ing Act of 1933, ch. 89, § 8, 48 Stat. 162, 168 (current version codified in scattered sections of 12
U.S.C. (1982)). The statutes which currently regulate FDIC operations are codified at 12 U.S.C. §§
1811-1832 (1982).
    \item The FDIC only insures deposit accounts in commercial and mutual savings banks. The deposit
insurance system was extended to include deposits in savings and loan associations in the National
(1982)), which created the Federal Savings and Loan Insurance Corporation. In 1970 Congress en-
acted legislation directing the National Credit Union Administration to insure accounts in credit un-
1790 (1982)).
    \item For a brief discussion of the history and current status of federal deposit insurance, see Isaac, supra
note 1, at 196-200.
    \item \textsuperscript{9} Preserving the stability of financial institutions is usually cited as the primary goal of the fed-
eral deposit insurance system. See, e.g., Scott & Mayer, Risk and Regulation in Banking: Some Propo-
    \item However, deposit insurance has also been justified on microeconomic grounds. Because of the high
information costs of investigating the strength of a financial institution and evaluating the quality of
an institution's management, small depositors generally do not learn of a bank's precarious financial
condition until payment has been suspended, when it is too late to act upon the information. The
critical role of bank deposits in the U.S. financial system necessitates the protection which deposit
insurance affords small depositors. See Isaac, supra note 1, at 200-02.
    \item \textsuperscript{10} L. CHANDLER & S. GOLDFELD, THE ECONOMICS OF MONEY AND BANKING 197-98 (7th ed.
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the absence of insurance, the failure of a bank or series of banks reduces deposits, which in turn reduces the money supply. In addition, depositors at other institutions may attempt to withdraw their money before those institutions also fail, thereby creating bank runs.\(^\text{11}\) By guaranteeing to replace deposits lost as a result of a bank failure, deposit insurance forestalls bank runs and thereby stabilizes the money supply at the pre-failure level.

In addition to deposit insurance, two other mechanisms, the discount window\(^\text{12}\) and the supervision and examination process,\(^\text{18}\) help safeguard the banking industry from destabilizing influences. These three mechanisms form a comprehensive safety net which maintains the soundness of the financial services industry. The existence of the two additional safety mechanisms is often overlooked and greatly complicates deposit insurance reform; any alteration in the effective protection afforded by one mechanism must take into account the impact of such a change on the protection afforded by the others.

Each safety mechanism plays a different role in protecting banks from failure. The importance of each mechanism varies, depending on the severity of the financial troubles confronting the institution. The role of the supervision and examination process is to establish norms for sound banking practices, to detect banks which are showing signs of weakness, to highlight those weaknesses to bank management, and to encourage or require corrective action.\(^\text{14}\) The other two safety mechanisms assume greater importance when a bank experiences more serious financial difficulties. FDIC insurance protects against the loss of small depositor confidence while a troubled institution undergoes rehabilitation. The discount window lends funds to an institution which has become illiquid, thereby

1977). Economists disagree on whether changes in the money supply are the most important factor determining the level of economic activity, but few question that changes in the money supply are an important determinant of the level of economic activity. It has been argued that the severity of the Great Depression resulted primarily from the sharp reduction in the money stock caused by bank failures and the refusal of the Federal Reserve System to supply reserves to offset currency drains. See M. FRIEDMAN & A. SCHWARTZ, A MONETARY HISTORY OF THE UNITED STATES: 1867-1960, at 299-419 (1963).


12. The discount window refers to the process by which a member bank, when short of reserves, can borrow short-term funds from the Federal Reserve System. The interest rate which the bank must pay on the borrowed funds is known as the discount rate, which is set by the Federal Reserve. L. CHANDLER & S. GOLDFELD, supra note 10, at 250-55. The process is not automatic. The Federal Reserve does not have to lend funds to each bank which requests them and will often refuse to do so to discourage banks from habitually using the Federal Reserve as a source of reserves. Id. at 253.


providing regulators with additional time to formulate a solution to the institution's problem and to avoid possible systemic shocks to financial markets. In his specific choice of proposed reforms, Isaac has not addressed the possibility that one or more of the other safety mechanisms can be used to respond to the changes caused by deregulation, thereby obviating the need for drastic changes in the deposit insurance system. The supervision and examination process provides one such possibility. If the FDIC could conduct continuous bank examinations and act on its findings immediately, it would never suffer a loss because it could simply request the chartering agency to close a failing bank when the bank’s net worth reached zero. Obviously, the FDIC cannot conduct continuous bank examinations. However, the FDIC can reduce the possibility that a bank will become insolvent between examinations by increasing minimum capital standards. When a bank's earnings decline between examinations, the bank’s capital serves as a buffer against insolvency. As a result, the cost to the FDIC of disposing of a failed institution is likely to be lower if the bank has a high capital ratio prior to its difficulties. This fact suggests that the proper response to deregulation may be strictly enforced minimum capital standards related to overall bank risk, combined with careful bank supervision, rather than a major restructuring of deposit insurance.

II. Deregulation and the Need for Reform

As described above, one purpose of deposit insurance is to eliminate bank runs by removing much of the risk of loss from bank failure which depositors would otherwise bear. Eliminating this risk, however, necessarily reduces depositors’ incentives to discipline banks which engage in excessive risk-taking. Consequently, Isaac has argued that without a strict scheme of regulation constraining the activities in which banks may...
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engage, the geographic scope of their operations, and the interest rates which they may pay, banks will be able to take excessive risks free of market discipline.\(^8\) As a result, he contends that deregulation in any of these areas will destabilize financial markets unless accompanied by substantial reform of the deposit insurance system.\(^9\)

Although some dangers exist, Isaac takes an unnecessarily pessimistic view of the risks posed by deregulation. In fact, the removal of product line limitations, geographic boundaries, and interest rate ceilings will not inevitably endanger the stability of the financial services industry. Deregulation in these areas actually may improve the industry's overall financial condition. Moreover, as mentioned above, enhancing bank supervision and examination can greatly reduce losses to the FDIC due to deregulation. Therefore, at least at present, the possible risks posed by deregulation do not justify the extensive changes proposed by the FDIC.

A. Product Line Expansion

The products and services which a banking organization may offer have always been strictly limited. The Depository Institutions Act of 1982,\(^{20}\) for example, prevents banks from engaging in most facets of the insurance business.\(^{31}\) Similarly, the Glass-Steagall Act\(^{22}\) prevents banking organizations from underwriting new issues of securities.\(^23\) Obviously, most banking organizations would like to expand their powers to underwrite municipal revenue bonds and perhaps eventually corporate debt. The perception that underwriting entails unacceptable risks, however, has forestalled regulatory approval of increased bank participation in such activities.\(^{24}\)

Rather than increasing risk, permitting banks to expand into new product lines which are not significantly riskier than normal banking activities will very likely create an opportunity for beneficial diversification, leading

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18. Isaac, supra note 1, at 204-06.
21. Id. at § 601, 96 Stat. at 1536-38 (amending 12 U.S.C. § 1843(c)(8)).
23. Id. at § 16, 48 Stat. at 184-85 (codified at 12 U.S.C. § 24 (1982)). Banking institutions are, however, permitted to underwrite general obligation municipal bonds.
to a lower risk of failure in the long run. Although the risk of insolvency may increase temporarily as banks engage in new activities, those activities can be isolated in legally separate, nonbank subsidiaries to protect the banks from additional risk. In addition, as mentioned above, enhanced bank capitalization and regulatory supervision can help shield banks from any financial problems their new activities might create.

B. Geographic Expansion

As with product diversification, geographic expansion may ultimately produce a more robust and shock-resistant financial system. Although both the McFadden Act and the Douglas Amendment to the Bank Holding Company Act effectively prohibit interstate banking, commercial banks currently provide some financial services across state lines. These interstate banking activities have not as yet had an adverse effect on bank risk or profitability; in fact, the significant rate of entry thus far suggests that these activities provide opportunities to enhance bank profitability.

25. Financial theory argues against the importance of firm level diversification because shareholders can diversify their portfolios to achieve the desired level of risk. See Schall, Asset Valuation, Firm Investment, and Firm Diversification, 45 J. BUSINESS 11 (1972) (diversification effects of firm investments are irrelevant). However, this argument may not apply to banks where the externalities caused by firm failures create a special need for stability.


30. See Whitehead, supra note 29, at 18 (domestic banking organizations control at least 7383 interstate offices, 1500 of which supply banking services).
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The Continental Illinois experience provides further support for the conclusion that geographic deregulation will benefit financial institutions. Many observers have attributed the problems of Continental Illinois in part to its reliance on foreign deposits, a practice necessitated by the fact that Illinois banking laws effectively prohibit the development of an extensive intrastate retail deposit base.

C. Elimination of Interest Rate Ceilings

Like product diversification and geographic expansion, the elimination of interest rate ceilings should not increase the risk of bank failure. Interest rate ceilings, often referred to as Regulation Q ceilings, have historically limited the interest rate on certain types of deposit funds. They were designed to avoid situations in which a bank would be forced to

31. In May 1984, the Continental Illinois National Bank and Trust Co. of Chicago, the nation's ninth largest bank, suffered a serious liquidity crisis after rumors of its impending failure triggered a run on the bank's deposits. Before the run stopped, depositors had removed a large portion of the bank's funds; estimates of the extent of the outflow range from $9 billion to nearly $20 billion.

The rumors followed a first quarter report of weak earnings, largely attributable to a $140 million forced write-off of bad loans and a $50 million drop in net interest income. During a period of rapid growth in the 1970's, Continental compiled a loan portfolio comprised largely of low interest loans to high risk clients. In addition, the bank acquired more than $1 billion in risky energy loans from the Penn Square Bank of Oklahoma, which failed in July 1982.

The failure of a bank the size of Continental would have precipitated an unprecedented wave of bank failures and could have undermined the stability of financial markets worldwide. The U.S. government therefore was forced to step in with the largest emergency aid package ever assembled for a financial institution to halt the run and calm the financial markets. To rescue Continental, the FDIC committed $4.5 billion from its $16.5 billion insurance fund. The Federal Reserve agreed to lend the failing bank an additional $3.6 billion, and 28 private banks arranged a $5.5 billion line of credit.

After an unsuccessful attempt to find a bank that would merge with Continental, the FDIC in July 1984 announced that it would purchase $3 billion to $4 billion worth of problem loans from the bank, paying Continental approximately 50% of their face value. As a consequence, the U.S. Government now effectively owns 80% of the shareholder equity in Continental. See Thurow, America's Banks in Crisis, N.Y. Times, Sept. 23, 1984, § 6 (Magazine), at 48, 72-73, The Continental Scare, NEWSWEEK, May 28, 1984, at 52; The Continental Bailout, NEWSWEEK, July 30, 1984, at 86.


33. As a result of the state's restrictive branch banking laws, large Illinois banks have been unable to maintain a stable base of domestic consumer deposits and have thus been forced to rely on foreign investment, through large uninsured certificates of deposits, as an important source of short-term funds. Continental's large loan losses forced the bank to increase substantially its dependence on overseas deposits. These European and Japanese depositors were the first to pull their funds out of the bank when rumors of Continental's impending insolvency surfaced. See The Continental Scare, NEWSWEEK, May 28, 1984, at 52, 54-55.


acquire risky assets that paid high interest rates to cover the high interest costs of the bank's deposits. Banks have competed away part of this interest cost ceiling, however, by offering implicit interest in the form of free check clearing and deposit services. They also have tried to compete by opening additional branches at convenient locations for depositors. The implicit interest paid nationwide by savings and loan associations, through free services and convenience banking, has been estimated at fifty percent of the difference between market rates and Regulation Q ceilings.

Furthermore, interest rate ceilings have had a substantial adverse effect on the ability of banks to attract funds. Whenever market interest rates rise above Regulation Q ceilings, bank deposits fall sharply. For example, as interest rates climbed in the late 1970's, money market mutual funds, which had no interest rate limitations, grew from $43 billion at the end of 1979 to $242 billion in November 1982. If banks had been free to pay market interest rates, a large percentage of this money probably would have been deposited in banks. Indeed, since December 1982, when banks were first permitted to offer money market deposit accounts yielding market-related interest rates, these accounts have grown to nearly $400 billion. Deposits in money market mutual funds have fallen by more than $60 billion during this period. If the removal of Regulation Q ceilings elicited substantial additional deposits, bank profitability might actually increase. Moreover, banks would no longer have the same incentive to pay implicit interest in the form of customer services. Interest rate deregulation thus should not adversely affect bank profitability and risk.

38. See W. Petersen, Effects of Interest Rate Ceilings on the Number of Banking Offices in the United States, table 2 (1981) (Fed. Reserve Bank of New York mimeo) (estimating that nearly one third of all banking offices in 1980 would not have existed without binding Regulation Q ceilings) (paper on file with the Yale Journal on Regulation); Chase, Interest Rate Deregulation, Branching, and Competition in the Savings and Loan Industry, 14 FED. HOME LOAN BANK BOARD J. 2 (1981) (estimating that 66.0% of all savings and loan association branch offices in California would not have existed without Regulation Q ceilings); Taggart, Effects of Deposit Rate Ceilings: The Evidence from Massachusetts Savings Banks, 10 J. MONEY, CREDIT & BANKING 139, 153 (1978) (estimating that 25.4% of all mutual savings bank branches opened in Massachusetts between 1970 and 1975 were established to compete for deposits within the restrictions imposed by Regulation Q).
39. See Spellman, Deposit Ceilings and the Efficiency of Financial Intermediation, 35 J. FINANCE 129, 134 (1980). See also Taggart, supra note 38, at 153 (estimating that Massachusetts mutual savings banks paid implicit interest to their depositors in an amount equal to nearly 40% of the difference between the regulated deposit rates and unregulated market rates).
42. Id.
43. See Flannery, supra note 37, at 13 (stock market data and accounting data on bank profitabil-
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In summary, it is by no means certain that deregulation will increase the risk of bank failure. Rather, deregulation may eventually create a stronger and more robust banking industry. Major changes in the deposit insurance program thus seem unwarranted, particularly since existing examination and supervisory processes can be strengthened to reduce the likelihood that deregulation will impose substantial losses on the FDIC. Furthermore, as discussed in the following part, the proposed reforms might themselves have adverse effects on financial stability.

III. An Evaluation of the FDIC’s Proposed Reforms

Economists agree that policies which fail to anticipate the reactions of the market to regulatory changes may create a misallocation of resources. Recent theoretical work, however, has established that such myopia also may lead to erratic and seemingly unpredictable dynamic behavior, technically termed “chaos.” This possibility suggests that regulators normally should adopt a cautious stance, favoring the status quo over changes which might produce unpredictable consequences. The reforms proposed by Isaac are comprehensive and may lead to unstable behavior by various market participants. They therefore should be evaluated with this potential for instability in mind. This section examines the possible effects of each of Isaac’s proposals.

A. Risk-Adjusted Premiums

Isaac’s first proposal is a system of risk-adjusted deposit insurance premiums. Isaac’s proposal, however, falls short of achieving its aims and would be destabilizing. Isaac correctly observes that deposit insurance insulates commercial banks from full market discipline over risk-taking. He also correctly argues that a properly constructed risk-based premium schedule would increase the cost to banks of risk-taking activity. Discipline over excessive risk-taking could be increased in two ways, depending upon how the premiums were implemented: (1) the variable premium rate would create a direct incentive for banks to limit their risk-taking activities and (2) public disclosure of the premium paid by a bank would trigger additional market discipline based upon the information in the disclosure. To be effective, however, a risk-based premium system must em-

45. Isaac, supra note 1, at 207.
ploy accurate measures of the riskiness of a bank's activities and impose premiums with significant risk differentials. Small risk differentials will not affect the amount of risk a bank will assume. Moreover, premiums based on inaccurate risk determinations may alter bank behavior in perverse and unpredictable ways.

The risk-based premium schedule which Isaac has proposed is seriously flawed because the contemplated differential is far too small to have any discernible impact on the amount of risk assumed by a bank. In addition, as Isaac candidly admits, the information and expertise necessary to set precise and reliable risk-adjusted premiums with meaningful risk differentials do not currently exist. As a consequence, Isaac's proposed system will not produce the desired results.

Even if the FDIC could set risk-adjusted premiums accurately, the use of such premiums to control bank risk-taking is unnecessary to ensure the soundness of the insurance system. As mentioned earlier, no failure need ever impose a significant cost on the insurance fund as long as it is promptly detected and the insuring agency acts swiftly. Rather than designing risk-adjusted premiums, then, regulators should try to improve their ability to recognize and react promptly to bank financial difficulties.

In addition to being unnecessary, even an ideal risk-based premium system may be counterproductive. Because a risk-based system would force banks to pay higher premiums only when they encountered difficulty and consequently became more risky, such a system probably would exacerbate the risk of bank failure. Furthermore, if premium differentials were large enough to influence bank behavior, they might have a perverse macroeconomic effect. Levels of credit risk typically are higher during downturns in the business cycle. Under a system of risk-adjusted premiums, this higher risk would cause insurance premiums to rise as the business cycle turned downward, hence discouraging banks from lending

46. The FDIC's current proposal would only adjust the partial refund of insurance assessments collected during the year by the FDIC in excess of operating and insurance expenses. See Isaac, supra note 1, at 207-08. Given historical levels of the rebate, such an adjustment would amount to a mere four or five basis points. (A basis point equals one one-hundredth of a percentage point.) When one considers that the normal spread on bank intermediation operations exceeds 100 basis points, it is evident that the direct impact of the adjustment on bank decision-making would be negligible.

47. Isaac, supra note 1, at 207 ("Under an 'ideal' system, the insurance fund would be fully compensated for all risk-taking. Such a system would, however, entail unrealistic data requirements and require risk quantification techniques not currently available.").


49. Some steps toward improving regulatory response, such as continuous monitoring of banks by computer, have already been suggested. See Conte, Regulators Say Banking Safeguards Are Faulty and Need an Overhaul, Wall St. J., Mar. 21, 1983, at 23, col. 4.
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money precisely when macroeconomic policy would dictate an increase in
the money supply. Similarly, the lower average premiums which would
accompany upswings in the economy would exacerbate the usual easing of
credit, fueling overexpansion of the economy.80

B. Partial Nonpayment of Uninsured Deposits

As the second feature of his deposit insurance reform package, Isaac has
proposed that the FDIC adopt a systematic policy of partial nonpayment
of uninsured deposits.81 Under such a policy, depositors with accounts ex-
ceeding $100,000 would not be fully protected in the event of bank fail-
ure.82 By placing depositors somewhat at risk, the FDIC would induce
those depositors to evaluate the risk levels of competing banks. As a result,
risky institutions would be forced either to offer a higher interest rate to
compensate for the higher probability of loss or to reduce their levels of
risk. By increasing the market discipline imposed by depositors, a partial
nonpayment policy would constrain risk-taking by financial institutions.

Although intuitively appealing, partial nonpayment of uninsured depos-
its presents several problems. Most seriously, the threat of partial nonpay-
ment would undermine the primary objective of deposit insurance: to
avoid the destabilizing effects of bank runs. In addition, the initial destabi-
lizing effects of such a program would induce many depositors to transfer
funds from their banks to insured accounts or low-risk securities. Finally,
the use of brokered CDs might thwart the policy altogether.

1. Encouraging Bank Runs

A partial nonpayment policy would encourage bank runs by giving de-
positors a strong incentive to withdraw their funds from a bank at the first
rumor of trouble. Such withdrawals would contribute to the financial in-
stability of the bank, causing even more depositors to make withdrawals.

50. See L. GOODMAN & A. SANTOMERO, VARIABLE RATE DEPOSIT INSURANCE: A RE-EXAMINA-
TION 2, 20 (July 1984) (fixed rate deposit insurance has important beneficial consequences for
macroeconomic stabilization which are not shared by a variable rate scheme) (paper on file with the
Yale Journal on Regulation).

51. Isaac, supra note 1, at 209-11.

52. Under the current system, all deposits up to $100,000 are de jure insured. See 12 U.S.C. §
1821(a)(1) (1982). Until recently, deposits greater than $100,000 were perceived to be de facto in-
sured as a result of the FDIC policy of disposing of failed banks through purchase and assumption
transactions rather than deposit payouts. As long as the failed bank was merged into another institu-
tion, uninsured depositors suffered no loss. For a discussion of the development of the purchase and
assumption transaction, see Isaac, supra note 1, at 202-03.

The FDIC broke the illusion that all deposits, regardless of size, were fully insured when it dis-
posed of the failed Penn Square Bank of Oklahoma through a deposit payout rather than a merger in
1982. Thurow, supra note 31, at 73. Penn Square was the only bank with assets exceeding $100
million to receive this treatment. Id.
Once an outright run began, all uninsured depositors would be compelled to participate because no one would want to risk being unable to withdraw at all. Moreover, many insured depositors might choose to flee rather than await the resolution of the crisis. Because most short term depositors can withdraw quickly, a partial nonpayment scheme could quickly compromise the stability of the financial system.

The present complex relationships among major banks suggests that a policy of partial nonpayment could contribute not only to the failure of a troubled bank, but also could harm those institutions with which the troubled bank had close relationships. The experience of Continental Illinois is instructive. Immediately after large depositors started withdrawing funds from Continental, depositors began to scrutinize other institutions more closely, creating temporary funding problems for a number of the largest banks. The crisis abated only when the FDIC and the Federal Reserve intervened. Major banks recognized the risk of disaster and, in an effort to quiet the market, rushed to lend funds to Continental.

Thus the highly interwoven character of the present financial system, with lines of credit extended between banks and loan participations shared by many banks, ensures that the effect of a run could not be confined to one or even a few banks. In the event of a run, the discount window might have to provide a minimally adequate level of liquidity to a major segment of the financial community.

53. Unlike longer term depositors holding CDs, short-term depositors do not forfeit interest payments or principal if they withdraw their funds at any time.
54. The attitudes of uninsured depositors have changed markedly since the Penn Square failure. They have started to run even more quickly, creating temporary liquidity problems for troubled institutions. Thurow, supra note 31, at 73. Continental Illinois faced serious liquidity problems in May 1984, less than two days after rumors began to circulate about its unexpectedly high loan losses. The Continental Scare, NEWSWEEK, May 28, 1984, at 52, 53-54. If the FDIC had had a stated policy of partial nonpayment of uninsured deposits at that time, it is likely that these depositors would have run even faster, necessitating more discount window borrowing at an earlier stage.
55. For example, Manufacturer Hanover Trust Co. experienced a small run in the wake of the Continental crisis. See Thurow, supra note 31, at 73.

A House of Representatives subcommittee has estimated that six banks with $385 million in combined assets would have immediately failed had Continental been declared insolvent. Twenty-two other banks would have been at serious risk of collapse because their exposure in Continental was between 50% and 100% of their capital. See N.Y. Times, Oct. 5, 1984, at D5, col. 1.
56. See supra note 31.
57. Morgan Guaranty Trust Co. and the Federal Reserve lined up 28 of the nation's largest banks to provide Continental with a $5.5 billion line of credit for as long a time as the bank needed to resolve its liquidity problems. See N.Y. Times, May 19, 1984, at A1, col. 6.
58. See, e.g., N.Y. Times, Oct. 5, 1984, at D1, col. 1 ($279 million in loan losses written off by First National Bank of Chicago could force six other major banks that participated in the loans to write them off as well).
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2. Destabilizing Initial Effects

The second problem with partial nonpayment is its initial destabilizing effect. A partial nonpayment system initially would cause significant shifts in the relative yields of bank CDs and government securities, as risk-averse, uninsured depositors moved their funds from financial institutions into relatively riskless securities such as U.S. Treasury obligations. Even though some depositors would not switch to government securities, they might still transfer their funds to less risky banks or perhaps only to the largest banks. As a consequence, most banks would be forced to pay a higher interest rate to obtain additional funds; at the same time, they would lose some of their deposits. This combination could induce troubled institutions to undertake even more risky loans. 59

3. Encouraging Brokered CDs

The final weakness of a partial nonpayment policy is that it would encourage the brokering of CDs. 60 For example, after the 1982 failure of the Penn Square Bank of Oklahoma and the FDIC’s announcement that it would not fully protect depositors with accounts exceeding $100,000, brokers began to break large deposits into $100,000 denominations, placing each in a different bank to ensure full insurance. 61

The encouragement of brokered CDs creates two reasons for concern. First, the use of brokered CDs can effectively circumvent the partial nonpayment policy by ensuring that no individual deposit is larger than $100,000. The second concern is that brokers often attempt to deposit their funds in the riskiest institutions, which must pay the highest interest rates. 62 Increased use of brokered CDs therefore may actually increase the cost to the FDIC of disposing of a troubled institution, because the institution will have had access to more insured deposits than it otherwise would. 63 Thus, because a partial nonpayment system would encourage further brokering of CDs, such a system does not seem wise.

59. See Koehn & Santomero, supra note 17, at 1240.
60. Brokering of deposits occurs in several ways. Under straight brokering, a money broker, acting on its own or at the request of an institution or institutions, solicits deposits from customers. The customer may send deposits directly to the bank at the request of the broker, or the broker itself may transfer the customer’s funds to the institution, having the deposit registered in its name as nominee or agent for the customer. Under a CD participation agreement, the broker purchases a large denomination certificate of deposit and sells interests in the certificate to customers. These practices allow FDIC insurance to apply to each individual customer to the maximum of $100,000. See Isaac, supra note 1, at 214 n.48.
62. Horvitz has demonstrated that institutions with low net worth are more likely to behave in a risky manner than are institutions with high net worth. See Horvitz, supra note 13, at 656-57. See also 49 Fed. Reg. 13,003, 13,006 (1984).
63. See Isaac, supra note 1, at 214 n.48. In an attempt to alleviate the strain on the deposit
In summary, partial nonpayment of uninsured deposits has several serious problems. Although such a strategy may impose an added measure of market discipline on banks, the costs of this additional discipline could be quite high.

C. Increased Disclosure

The third element of Isaac's proposal would require banks to disclose more information to the public. Such additional disclosure is intended to enable the market better to identify risky banks and to exercise greater discipline over them. In fact, increased disclosure will not necessarily heighten market discipline. Studies have found that the stock market already identifies large problem banks well before the FDIC does. Increased disclosure therefore would be largely redundant for the sophisticated large investor or financial analyst. Even for those banks whose stock is not actively traded, publicly available data and existing statistical models are sufficient to identify most troubled banks one to two years before failure, and sometimes up to six years in advance.

Furthermore, additional disclosure may not be cost justified. Theoretical analysis suggests that competition will enforce full disclosure if disclosure is costless. Where disclosure is costly, however, full disclosure will not be optimal. In such cases, the market will demand information up to the point at which the marginal cost of securing additional information equals the marginal benefit. Assuming that the market is already demanding the optimal level of information, increased disclosure may lead to suboptimal allocation of resources.

insurance system caused by deposit brokering, the FDIC and the Federal Home Loan Bank Board issued rules in March 1984 limiting to $100,000 the insurance coverage provided to accounts placed either by or through a broker. 49 Fed. Reg. 13,003 (1984) (to be codified at 12 C.F.R. pts. 330, 561, 564). These regulations were declared illegal on June 20, 1984. See FAIC Securities, Inc. v. United States, No. 84-0959 (D.D.C. June 20, 1984), reprinted in 49 Fed. Reg. 27,294 (1984). In response to this decision, the FDIC recently issued an interim final rule requiring member banks with substantial brokered deposits to report such holdings to the FDIC on a monthly basis. 49 Fed. Reg. 27,487 (1984) (to be codified at 12 C.F.R. § 304.4).

64. Isaac, supra note 1, at 208-09.
65. Id. at 208.
69. Of course, it is important to recognize that market failures may prevent the attainment of this
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Even if increased disclosure were cost-effective and non-redundant, it would not increase market discipline unless implemented in conjunction with a partial nonpayment policy. If all depositors perceived themselves to be fully protected, they would have little incentive, apart from liquidity considerations, either to collect information regarding the financial prospects of a given bank or to react to such information. On the other hand, if depositors perceived themselves to be less than fully insured, an unstable condition might result in which bank runs could be precipitated even by false information.

IV. Alternatives to Deposit Insurance Reform

The potentially destabilizing effects of the FDIC's proposed reforms suggest the prudence of considering other workable alternatives. Three possibilities merit further attention: strengthening the bank examination and supervision process, increasing the frequency of payouts in certain situations, and imposing additional market discipline through bondholders and long-term depositors.

A. Enhanced Bank Examination and Supervision

The most promising alternative to the FDIC's proposed reforms is to strengthen the bank supervision and examination process through the imposition of more stringent capital requirements and the use of supplementary early warning models. Studies show that such models are very effective in detecting banks with potential liquidity problems. By using such models, the FDIC can direct its scarce resources to those institutions which most need attention. Spotting problem banks at an early stage is possibly the most important step the FDIC can take to protect the integrity of the deposit insurance system.

These objectives should also be pursued through more stringent capital requirements. As mentioned above, increasing capital requirements will

optimal equilibrium.

70. Early warning models use both accounting data, such as currently reported balance sheet and income sheet data, and general market data to project the future financial soundness of a bank.

71. Several studies have shown the effectiveness of using early warning models based upon currently reported balance sheet and income sheet data. See Korobow, Stuhr, and Martin, A Nationwide Test of Early Warning Research in Banking, FED. RESERVE BANK N.Y. Q. REV., Autumn 1977, at 37; Martin, supra note 67; Sinkey, A Multivariate Statistical Analysis of the Characteristics of Problem Banks, 30 J. FINANCE 21 (1975). Other recent studies have demonstrated that market value data may be useful in supplementing the accounting data already available. See Pettway & Sinkey, supra note 66; Pettway, supra note 66; Merton, An Analytic Derivation of the Cost of Deposit Insurance and Loan Guarantees: An Application of Modern Option Pricing Theory, 1 J. BANKING & FIN. 3 (1977), Sharpe, Bank Capital Adequacy, Deposit Insurance and Security Values, 13 J. FIN. & QUANTITATIVE ANALYSIS 701 (1978).
lengthen the interval between the time a bank becomes unprofitable and the time it becomes insolvent. A longer interval, combined with earlier detection, will further increase the FDIC's ability to spot problems before large losses occur. Obviously, early detection of problem banks must be combined with prompt and decisive action by the supervisory agencies once a problem has been identified.

B. Increased Use of Deposit Payouts

A second alternative to the FDIC's proposals, which could be applied only where the risk of systemic complications is low, would be for the FDIC to increase its use of the deposit payout mechanism. Under the current system, when a bank is declared insolvent, the FDIC may either close the bank and pay off depositors (as in the Penn Square case) or engineer a merger or consolidation with another bank, often referred to as a purchase and assumption (P&A) transaction. The FDIC has considerable discretion in determining which method to use in dealing with an insolvent institution, but it usually chooses the P&A transaction. Since 1960, the FDIC has used the P&A transaction to deal with the majority of failed commercial banks, including every failed bank with assets exceeding $100 million except Penn Square.

The P&A transaction benefits the FDIC because the agency can recover a premium for the "going concern" value of the bank. Such a transaction also benefits the uninsured depositor by effectively insuring his or her deposits. As long as the market perceives that the FDIC will use P&A transactions in large bank failures, such banks can acquire deposits on more favorable terms than can small banks. If the FDIC chose the deposit payout alternative more frequently, heightened market discipline of bank risk-taking could be achieved within the confines of the present system.

Of course, deposit payouts should only be used when systemic risk is low. Stability of the financial sector has always been the FDIC's most important goal and should not be compromised in an effort to exert greater market discipline. The need to maintain stability limits the frequency with which regulators should resort to the payout alternative.

72. Isaac, supra note 1, at 202-03.
73. Id.
74. Id. at 202, 205.
75. Id. at 203.
76. Id.
77. Id. at 205.
78. See Thurow, supra note 31, at 73.
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When the risks of destabilizing effects are low, however, an occasional deposit payout may be a reasonable way to increase market discipline.

C. Increased Market Discipline Via Equity and Debt Holders

A third alternative to deposit insurance reform is to create incentives for shareholders and bondholders to exert greater market discipline over banks. Shareholders and subordinated debtholders (or bondholders) are in many respects better situated to discipline banks than are short-term depositors. Subordinated debtholders cannot withdraw their funds at face value from a weak bank on short notice. Shareholders, of course, cannot withdraw their investments from the bank itself; they can liquidate their investments only in the stock market (if the bank's stock is publicly traded) or by negotiating a private sale. In either case, the value of the stock depends on the bank's prospects at the time of sale. Hence, these parties have strong incentives to investigate a bank's long-term prospects before making their initial investments.

In order for shareholders and subordinated debtholders to exert greater market discipline, capital adequacy standards must be revised. The FDIC should require banks to maintain a higher protective cushion of equity and subordinated debt as a percentage of assets. Increasing the effective "coinsurance" provided by shareholders and subordinated debtholders will benefit both bank depositors and the FDIC by reducing the possibility of deposit losses from a bank failure.

Despite the possible benefits of increased coinsurance, however, a number of problems would hamper the implementation of such a proposal and make it unacceptable as a short-term solution. First, regulators must resolve the difficult issues of what should qualify as a subordinated note, when convertibility should be allowed, and what the appropriate maturities should be. Second, regulators must develop safeguards to ensure that large blocks of debt do not mature at once. Third, regulators must determine what sort of debt-equity standard to impose, giving adequate consideration to the market's ability to supply the required level of capital. Finally, regulators should consider the costs to society of bank overcapitalization, particularly if capital must be channeled from other, more profitable types of investments.

More seriously, placing debt and equity holders as well as long-term

78. Isaac has briefly discussed this possibility. See Isaac, supra note 1, at 212-13.
79. Bondholders, moreover, because they receive a contractually fixed return, receive no benefit from a bank's assumption of increased risk. This, of course, is not necessarily true of shareholders.
depositors at greater risk might discourage these parties from placing their funds in financial institutions. The large, sophisticated investor faces many competing alternatives and simply may choose not to place deposits in banks. For example, large, negotiable CDs with maturities in excess of one year currently comprise only ten percent of the total number of large negotiable CDs. Such long-term deposits might diminish further if they were not insured, severely hindering the ability of financial institutions to make fixed-rate term loans.

In summary, at least two promising responses to deregulation currently exist: improvements in the bank examination and supervision process and the more frequent use of deposit payouts in situations involving low systemic risk. These changes can be incorporated into the present system without great difficulty and without creating serious destabilizing effects. The third alternative, inducing subordinated debtholders or shareholders to exert greater market discipline, is attractive in many respects, but the difficulties which might accompany its implementation require further study before it can be considered a serious alternative.

Conclusion

The three reforms of the current deposit insurance system which Isaac has proposed—risk-adjusted deposit insurance premiums, partial nonpayment of uninsured deposits, and increased disclosure—would seriously undermine the stability of financial markets if implemented at the present time. Moreover, such reform may be unnecessary. Relaxation of current product line limitations, geographic restrictions, and interest rate ceilings can proceed smoothly as long as banks are required to maintain sufficient levels of capital and are adequately supervised.

If greater market discipline of banks is desirable, however, some changes may be necessary. A survey of the possible alternatives to the Isaac proposals indicates that the occasional use of deposit payouts, rather than purchase and assumption transactions, may be desirable when systemic risk is low. Another alternative, inducing shareholders and subordinated debtholders to exert greater market discipline, deserves further consideration. In short, deposit insurance reform raises complicated issues; hence, the FDIC's proposals may work better on paper than in practice.