Preferred Sources of Market Discipline

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The 1980s was a turbulent period for the financial services industry. The federal safety net—particularly deposit insurance—which was heralded by many for sustaining industry stability for nearly half a century, was suddenly criticized as a major cause of many of the industry’s problems. In response to numerous proposals to modify the safety net, Congress enacted the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA). The new legislation emphasized the need to reform the safety net by shifting more of the risk of bank failures to depositors and away from the insurance fund and taxpayers. In a previous article appearing in this Journal, Professor Krishna Mantripragada discussed the costs and benefits of depositor discipline and evaluated the attributes of moving from the dollar-based insurance of FDICIA to a maturity-based coverage that insured only short-term deposits. In this Article, Mr. Evanoff expands the discussion of market discipline and recommends an adjustment to the current bank regulatory structure that utilizes an alternative form of discipline. Evanoff emphasizes the unique attributes of subordinated debt and claims that a regulatory structure relying on an increased role for subordinated debt in banks’ capital structure requirements would be preferable to either the size- or maturity-based forms of depositor discipline. He contrasts the effectiveness of the proposed regulatory structure with alternatives relying on depositor-imposed market discipline by analyzing the behavioral changes the proposed structure would instill in bankers, depositors, and regulators.

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Introduction

The past decade was a period of turmoil in the U.S. financial services industry. The failure rate for depository institutions was greater than at any other time since the Great Depression. Losses per dollar of deposits resulting from these failures were greater than at any other time in U.S. history. The losses caused the insolvency and subsequent replacement of the insurance fund for federally insured savings and loan associations with a new fund capitalized

with taxpayer dollars and housed within the Federal Deposit Insurance Corporation (FDIC). Facing similar concerns about the status of commercial banks, Congress passed legislation allowing the dwindling federal bank insurance fund to be recapitalized with public funds. A number of state sponsored and private deposit insurance funds also failed, causing substantial losses to customers' life savings. The depletion of these insurance funds occurred during a period when the competitive position of depository institutions deteriorated. Former premier customers bypassed the highly regulated bank intermediaries and directly accessed the capital markets at an increasing pace while less regulated bank competitors gained market share by offering a wider array of services on more flexible terms.

This situation placed legislators and regulators of depository institutions in an unenviable position. If they had reduced restrictions on product offerings and geographic expansion, the competitive position of depository institutions would have improved. Safety and competitive concerns, however, along with strong opposition by smaller banks and nonbank competitors, precluded this policy option. Placing risk of loss from institutional failures on customers with uninsured deposits would have cushioned the insurance funds (and perhaps the taxpayers), but regulators were concerned about systemic risk and the potential for panic-driven bank runs. Regulators could have prevented depletion of the insurance funds if they had closed depository institutions when they became insolvent. Instead, regulatory forbearance was practiced, which allowed firms to continue operating even after achieving a negative net worth. As a result, accrued losses became so large that closing all insolvent banks would have wiped out the insurance fund and raised fears about systemic bank runs and significant concerns about the very viability of the U.S. financial services industry.

In response, Congress passed the Federal Deposit Insurance Corporation Improvement Act (FDICIA)\(^2\) in late 1991. The legislation aimed to improve the health of the industry and provided regulators with specific means to recapitalize and reform the deposit insurance fund. A controversial provision of FDICIA was its mandate of decreased reliance on the too-big-to-fail doctrine—the practice of rescuing all creditors of large commercial banks when they encounter financial difficulties. This doctrine emerged from concerns that the closing of large banks could result in systemic failures. Congress believed that regulators had been too quick to invoke the too-big-to-fail policy, thereby reducing the incentive of depositors to monitor bank behavior. Regulators had shifted the cost of recapitalizing failed institutions away from depositors, who had a vested interest in the bank, to the taxpayer, who did not. By reducing reliance on the too-big-to-fail doctrine, FDICIA shifted more of the risk of bank

failures back to depositors. With increased exposure, depositors now have more incentive to impose additional discipline on the risk behavior of financial institutions.

In a probing article, Professor Krishna G. Mantripragada described the events leading to the passage of FDICIA and critiqued aspects of the Act which shifted risk away from the insurance funds and toward depositors.\(^3\) Professor Mantripragada discussed the conditions necessary for increasing effective depositor discipline and questioned whether the Act would effect changes to create a banking environment in which these conditions exist.\(^4\) He then offered an alternative to the Act's dollar-based insurance coverage by which coverage would depend on the maturity of the liability rather than its size.\(^5\)

This Article expands the discussion of market discipline in the financial services industry and offers still another alternative that has all of the favorable characteristics of both dollar-based and maturity-based deposit insurance coverage, relatively few of the problems, and a number of additional desirable features. Professor Mantripragada correctly states that the risk associated with the assets of a depository institution will determine the level of risk incurred by the suppliers of funds, including depositors, equity holders, and holders of subordinated debt. The cushions provided by each of these classes of creditors can serve to protect the insurance fund. Each class of creditor is not, however, equally effective. This Article presents an alternative bank regulatory regime in which increased reliance is placed on subordinated debt holders—i.e., unsecured debt holders that receive repayment only after all obligations to secured and more senior debt holders have been fully satisfied—to manage the riskiness of bank assets and to serve as a cushion to protect the insurance fund. Under such a system, subordinated debt holders would replace depositors as the banks' major source of market discipline.\(^6\) The numerous advantages of this arrangement are explained in detail.

Part I of this Article describes a traditional model of financial intermediation between depositors and bankers, in which each finds it in its own self-interest to manage prudently bank risk. Potential problems with this model are then discussed, followed by a brief discussion of Mantripragada's recommendations, which partially resolve these problems. Part II introduces a bank regulatory reform proposal which increases reliance on subordinated debt holders to discipline bank behavior and significantly decreases the need for depositors to serve this function. A special effort is made to describe changes in the incentive structure for bankers, regulators, and the source of market discipline as

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4. Id. at 558-62.
5. Id. at 571-73.
6. The term bank will be used throughout this Article in the generic sense to encompass thrifts and other depository institutions.
subordinated debt holders replace or augment depositors in this role. Part III provides a detailed comparison of the effectiveness of the subordinated debt proposal to a number of alternative recommendations, including Mantripragada's maturity-based deposit insurance coverage. The Article concludes that the subordinated debt proposal merits serious consideration and would be preferable to either maturity-based coverage or the dollar-based deposit insurance coverage retained by FDICIA. In addition to benefitting the deposit insurance fund and taxpayers, the new proposal should appeal to bankers by creating a less restrictive and more stable regulatory environment.

I. Depositors as the Source of Market Discipline in Banking

The intermediation process is the procedure through which banks transform what are typically short-term liabilities into longer-term earning assets. Operating in their own self interest as a major source of bank liabilities, depositors monitor the activities of the bank. The following Sections elaborate on this process by which depositors discipline bank behavior and discuss potential problems with the current arrangement. Professor Mantripragada's proposed modifications that seek to eliminate problems inherent in the current monitoring mechanism are then reviewed.

A. The Traditional Relationship Between Depositor Behavior and Bank Behavior

Businesses hold capital as a cushion against unexpected changes in earnings or asset values. The role of capital in financial intermediaries is similar with one important exception—the additional presence of a safety net. In the business of financial intermediation, bankers purchase short-term funds in the marketplace and transform them into earning assets with longer maturities. A major portion of these funds, demand deposits, are payable on demand at the request of the provider of the funds. Absent the safety net (most notably, deposit insurance) the providers of this working capital (depositors) are at risk. Depositors monitor their "investment" by evaluating the banks' activities to ensure that the assets generated by the banks are of acceptable quality. If the quality of the banks' portfolio declines, depositors will demand a higher return on the investment commensurate with the increased risk or will simply withdraw their funds. The banks, needing a steady flow of reasonably priced working financial capital, have an incentive to maintain a high quality portfolio. If a large deposit withdrawal does occur, the portfolio maturity mismatch may force the banks to borrow funds to meet liquidity requirements. This potential funding problem highlights the importance of a funding source (e.g., a lender-of-last-resort making fully collateralized loans) to make liquidity available. Insolvent firms can be closed with losses being absorbed by depositors.
Policymakers, however, have long believed that bank runs, a sudden withdrawal of a bank's deposit accounts due to speculation regarding a deterioration in the bank's financial condition, may be contagious. The concern is that a bank run could, at a minimum, disrupt financial markets, and may actually cause an otherwise financially sound bank to fail. The potential for destabilizing bank runs was in fact one of Congress's major reasons for introducing deposit insurance.

The current U.S. deposit insurance scheme insures up to $100,000 of deposits per account. Until 1993, banks paid a flat rate premium to the insurance fund for this coverage, regardless of the riskiness of their assets. Beginning in 1993, the portfolio risk of each bank roughly determined the amount of the premiums assessed. The premium range, however, was relatively narrow—$.23 to $.31 per $100 of domestic deposits—and few argue that this range adequately accounts for risk differentials.

The benefits of deposit insurance do not come without costs. In the absence of deposit insurance, the potential for a bank run would discipline bank behavior with respect to the riskiness and quality of its portfolio. The presence of deposit insurance, however, severs the depositor-as-investor relationship between the depositor and the bank and vitiates the depositor's incentives for monitoring the bank's behavior. This reduction in market discipline is typically given as the major justification for government regulation of the industry.

Few would argue, however, that regulatory discipline alone can adequately manage the risk behavior of banks. Regulatory discipline is not only expensive, but events of the 1980s also indicate that it is occasionally ineffective. The regulatory problems present in the 1980s and the resulting need for regulatory reform have been summarized elsewhere. As part of that reform, Congress attempted to increase the role of the depositor as a source of market discipline to supplement regulatory discipline.

B. Potential Problems in Using Depositors to Discipline Bank Behavior

The conditions necessary for depositors to monitor bank activity effectively, however, may be difficult to achieve. According to Professor Mantripragada,


these conditions include the following: (1) there must be a group of depositors for whom risk is a primary concern in choosing a depository; (2) the discipline imposed by depositors must be severe enough for the management of a depository to feel, but not so drastic as to deny management a chance to respond to the depositors’ concerns; (3) depositors must have access to enough information to be able to judge bank risk adequately; (4) banks must be allowed to fail, resulting in losses to depositors; and (5) the banking industry must be financially healthy and enjoy depositor confidence.

Basically, to be effective, depositor discipline should curb “the risk escalating behavior of depository institutions without destabilizing the financial system or leaving the small depositors unprotected.” In practice this is widely thought to be difficult to achieve because the depository disciplinary system encounters a “razor’s edge.” Eliminate deposit insurance and depositors may run in response to negative news concerning the financial condition of the bank, violating condition (2). However, the provision of 100 percent coverage of deposits may so insulate depositors as to make them indifferent to the riskiness of their bank’s activities, violating condition (1). The option typically chosen is a compromise between these two extremes: providing no or limited insurance to some subset of depositors chosen to impose the necessary discipline. The problem with this approach is that any subgroup of uninsured depositors large enough to discipline banks is also large enough to pose the contagion problems policymakers fear. Thus, one of the first two conditions is typically violated or believed by regulators to be violated.

9. See Mantripragada, supra note 3, at 558.
10. Id.
11. The terminology is commonly associated with economic growth models such as those developed in Roy F. Harrod, An Essay in Dynamic Theory, 49 ECON. J. 14 (1939) and Evsey D. Domar, Capital Expansion, Rate of Growth and Employment, 14 ECONOMETRICA 137 (1946). Former Federal Reserve Board Chairman Paul Volcker referred to it as the “appropriate balance.” Senate Comm. on Banking, Housing and Urban Affairs, 99th Cong., 1st Sess. 1265 (1985) [hereinafter Volcker] (statement of Paul A. Volcker, Chairman, Board of Governors of the Federal Reserve System).
12. Actually this is a strong characterization of the conditions required for depositor discipline to be effective. Condition (2) does not have to be violated: regulators simply have to believe it will be and behave accordingly. A number of economists believe that regulators’ concern about systemic bank runs is unwarranted or excessive, and that losses incurred during past bank failures should have been imposed on depositors. Proponents of this view argue that bank runs will be a flight to quality instead of a flight to currency—a shifting of deposits within the banking system, not a withdrawal from the system. Therefore, while individual banks may fail, this will not have macroeconomic effects because the monetary aggregates will not be affected. If a bank run occurs and the bank is solvent, having access to a liquidity source, such as a lender-of-last-resort, can resolve the problem. Thus, systemic bank runs from “bad” to “good” banks should not be a problem. The behavior of regulators during the 1980s suggests they either did not totally accept this argument or had legitimate concerns about the solvency of a number of “bad” banks which could be subject to systemic bank runs and had an implicit objective of minimizing the number of bank failures.
13. When limited deposit insurance was used in the 1980s, the first condition was frequently violated through the use of brokered deposits. Similarly, there were significant concerns by regulators that the second condition would be violated. These contagion fears prompted regulators to intervene and protect uninsured depositors from loss. Although the appropriateness of the “too-big-to-fail” policy has been severely criticized, it was adopted because of the implicit assumption by regulators that the violation of condition (2) resulted in excessive social costs. That is, they were willing to eliminate the benefits of condition (1) to avoid the costs of violating condition (2).
The three remaining conditions may also be violated. Because regulators are generally concerned that the market may erroneously interpret information concerning the financial condition of a bank (e.g., CAMEL ratings, examination reports) they do not provide or allow full public disclosure. This lack of information, together with the implicit guarantee by bank regulators, reduces the effectiveness of market monitoring of troubled banks. Because of this combination of regulatory protectiveness and ineffective market oversight, many insolvent banks that should have been closed in the 1980s were allowed to continue operating. Additionally, depositors at large troubled institutions were frequently insulated from losses. Although FDICIA addresses these problems, regulators can still invoke the too-big-to-fail doctrine if they believe it serves the best interest of the nation’s financial system—precisely the reason they have given for using the doctrine in the past.

Condition (5), regarding the health of the banking industry, is obviously beyond the control of regulators and may also be violated.

C. Adjusting Depositor-Induced Discipline: Mantripragada’s Maturity-Based Alternative

Since it is nearly impossible to meet all of the conditions that are necessary for effective depositor monitoring, commentators have recommended numerous alternatives to traditional deposit insurance. Professor Mantripragada, for example, recommends maturity-based insurance coverage. Under his proposal, long-term deposits would be considered financial investments and would not be insured. Short-term deposits, which are essentially transaction balances, would be fully insured. This system would reduce the potential for bank runs because long-term deposits would not be payable on demand. Although Professor Mantripragada provides a thorough description of the benefits of the proposed means to introduce depositor-induced market discipline, he also realizes the potential problems. Regulators may have a difficult time determining the appropriate maturity ceiling for fully insured deposits. More importantly, regulators may hesitate to enforce the insurance limits.

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15. However, the procedures required for regulators to implement the too-big-to-fail policy are much more formal under the new legislation; see FDICIA §141(d).

16. Mantripragada, supra note 3, at 571.

17. Similar recommendations were earlier made by Frederick S. Carms, Should the $100,000 Deposit Insurance Limit be Changed?, 2 FDIC BANKING REV. 14 (1989); Frederick T. Furlong, A View on Deposit Insurance Coverage, ECON. REV., FED. RESERVE BANK OF SAN FRANCISCO (1984); and Mark J. Flannery & Aris A. Protopapadakis, Risk-Sensitive Deposit Insurance Premia: Some Practical Issues, BUS. REV., FED. RESERVE BANK OF PHILADELPHIA, Sept.-Oct. 1984, at 3.

18. Mantripragada, supra note 3, at 572.
possibility alone seriously undermines the potential usefulness of any system
of depositor discipline, whether enforced with dollar-based or maturity-based
coverage limits." These and other potential problems are discussed after
introducing an alternative means to impose market discipline.

II. An Alternative Bank Regulatory Plan

The current system, which relies on depositors to impose market discipline
on banks, has a number of potential problems. The relatively minor
modification offered by Professor Mantripagada addresses some of these issues,
but leaves many of them unresolved. This Article offers an alternative plan in
which the regulatory role of the depositor is significantly reduced without loss
of market discipline. The Article then explains how the proposed plan favorably
affects the incentive structures, and resulting behavior, of banks and regulators.

A. Preferred Sources of Market Discipline: Subordinated Debt Holders

A thorough analysis of the banking situation indicates that the "razor's
dge" problem in using depositors as the source of market discipline may be
unavoidable. In the ideal regulatory solution, which must address the five
conditions discussed above, market discipline would be imposed on the risk
behavior of banks, regulators would allow this disciplinary force, and bank runs
would not occur. This can best be achieved if regulators reassign the
disciplinary role currently assumed by depositors to subordinated debt
holders.

This policy of using subordinated debt holders as the major source of
market discipline in banking would require changes in the existing capital
adequacy requirements. Under current capital standards, banks are required to
hold a minimum ratio of core capital (consisting almost entirely of common
stockholder equity) to risk-adjusted-assets of four percent, a minimum ratio of
total capital (consisting of core capital plus supplementary capital such as
allowances for loan losses, perpetual preferred stock, and subordinated debt)
to risk-adjusted-assets of eight percent, and a minimum core capital to total
assets ratio of four percent. These capital requirements would be modified

19. Id. at 573.

20. See Douglas D. Evanoff, Subordinated Debt: The Answer to Regulatory Reform, BANKERS MAG.,
Sept.-Oct. 1992, at 22; Paul Horvitz, Subordinated Debt is Key to New Bank Capital Requirements, AM.
BANKER, Dec. 31, 1984, at 5; Paul Horvitz, A Free-Market Approach to Saving Troubled Banks, AM.
RESERVE BANK OF CHICAGO (1989).

21. The four percent ratio to total assets, the leverage ratio, is somewhat subjective as regulators can
vary it based on supplementary regulatory information. A description of bank capital requirements can be
found in William P. Keeton, The New Risk-Based Capital Plan For Commercial Banks, ECON. REV., FED.
RESERVE BANK OF KAN. CITY, Dec. 1989 at 45; Board of Governors of the Federal Reserve System, Press
Release (Oct. 5, 1992) (announcing issuance of a final rule to carry out the "Prompt Corrective Action"
provision of FDICIA). The details of the new capital structure proposed here most closely resemble those
to take advantage of the positive attributes of subordinated debt. Specifically, a significant portion of the total capital that satisfies the current risk-based capital requirements would take the form of subordinated debt. The eight percent minimum capital requirement would be restructured to require a minimum of four percent equity and four percent subordinated debt. That is, under this proposal, banks would be required, not allowed, to hold a significant portion of their capital in the form of subordinated debt. Such a requirement not only recognizes that subordinated debt can serve as a capital cushion, it also attempts to utilize fully its superior characteristics.22

In most nonbank firms, equity alone serves the role of capital. In banks, however, subordinated debt serves as a buffer against income variations for both depositors and the insurance fund as well as, or perhaps better than, equity capital.23 Equity holders stand to share in all the gains received from the investments of the bank. On the down-side (i.e., losses), however, the equity holders' liability is limited only to the extent of their investment. Since riskier investments typically have the potential for a larger return, equity holders tend to accept greater risk, and to allow the bank to hold a riskier portfolio, than they would without limited liability. This tendency becomes particularly acute and apparent when the market value of the bank has declined to a point approaching insolvency. In this “end-of-game” scenario, equity holders, facing the probable loss of their equity stake and having little more to lose given their limited liability, want the bank to take on risky assets in an attempt to achieve a large, but low probability, payoff which will restore the bank to solvency.24

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22. The percentages suggested here are deemed reasonable but could be marginally adjusted. The important point is to increase the role of subordinated debt in the capital structure. Under current bank capital requirements, subordinated debt can count as no more than a third of total regulatory capital. Although they have not recommended it as a requirement, in the past, representatives from the FDIC, Treasury, and the Federal Reserve have supported the use of subordinated debt to increase bank capital levels. See U.S. DEP’T OF TREASURY, RECOMMENDATIONS FOR CHANGE IN THE FEDERAL DEPOSIT INSURANCE SYSTEM 68 (1985); see also Volcker, supra note 11, at 29. Although banking organizations have neither endorsed nor critiqued the plan proposed here, a review of the recommendations made by these groups suggests that many of the characteristics they desire in a bank regulatory reform plan are consistent with those of this plan. See Bartholomew, supra note 7, at 147-57. There are also indications that the Federal Reserve is introducing regulatory changes that will make it easier for banks to increase capital levels by issuing subordinated debt. See Richard Layne, Fed Smooths Way for More Subordinated Debt Issues, AM. BANKER, Sept. 2, 1992, at 16. Recently banks have also revealed a preference for issuing subordinated debt. See Bart Fraust, Banks' Offerings of Subordinated Debt Surge, AM. BANKER, Dec. 4, 1992, at 14; William C. Handorf, Market Reaction to Banks that Issue Capital, BANK SEC. MONTHLY, Dec. 1992, at 3.

23. For additional discussion on this issue, see George J. Benston, The Purpose of Capital in Institutions with Government-Insured Deposits, 5 J. FIN. SERVICES RES. 369, 376 (1992).

If the increased risk results in losses, the loss would be borne by the FDIC when the bank fails. Since the value of the nearly insolvent bank is already minimal, the equity holders risk losing nothing in this process.

While depositors’ liability is also limited to the extent of their deposit, they do not have the potential to realize any up-side gains from having banks hold riskier portfolios. Thus, depositors are likely to scrutinize more rigorously the investment behavior of banks. Depositors, however, are not ideal disciplinarians. Critics argue that depositors may not have sufficient information, or may not be capable of adequately monitoring the bank. Moreover, there is the on-going potential problem of systemic bank runs that regulators feared throughout the 1980s. Subordinated debt holders, in contrast, are not subject to these flaws, making them a superior source of market discipline.

In changing the capital structure requirements of banks to require increased levels of subordinated debt, regulators must ensure that the new structure possesses certain characteristics which provide bankers with the appropriate incentives to control risk. The changes proposed here fit well within the capital guidelines introduced in FDICIA. First, the thrust of the proposal would be to require that a significant portion of total capital be held in the form of subordinated debt. Total capital as defined in FDICIA currently includes subordinated debt. Second, sanctions on bank dividend policy, payment of management fees, deposit growth, and deposit rates would be progressively increased as the bank’s performance deteriorated. FDICIA explicitly provides for these limitations in its prompt corrective action guidelines. Third, the average maturity of the subordinated debt would have to be sufficiently short to require the bank to go to the market to roll over debt on a regular basis but also long enough to tie the debt holders to the firm and make their inability to run meaningful. Additionally, the maturity would have to be staggered sufficiently to enable the firm’s behavior to be disciplined by the necessity of approaching the market frequently. One possibility would be to have the debt maturity be five to seven years, rolled over semi-annually. Currently, subordinated debt can be counted as supplementary capital if the average original maturity of the debt is at least seven years.

25. See Garten, supra note 8, at 132-44; Mantripragada, supra note 3, at 558-62.
27. A variant of the proposal would require the bank to issue "puttable" subordinated debt. Under this arrangement, debt holders could demand repayment at any time. Typically, debt holders would do so whenever the bank’s solvency was in doubt. The bank would then have 90 days to reissue replacement debt; if it could not, it would be taken over by regulators. This arrangement would serve as an alternative means of triggering recapitalization or liquidation. Since the maturity of the debt could be longer term, it would also reduce the transaction costs of rolling over debt issues. See Larry Wall, A Plan For Reducing Future Deposit Insurance Losses: Puttable Subordinated Debt, ECON. REV., FED. RESERVE BANK OF ATLANTA, July-Aug. 1989, at 2. A potential problem with this variant of the proposal is that debt holders, like depositors, could initiate a panic run on the bank. The 90-day period, however, would allow the bank time to prove its solvency to the marketplace or the regulator time to resolve the bank in an orderly fashion.
B. The Regulatory Process Under the Alternative Regulatory Plan

Because holders of the subordinated debt would obviously be risk sensitive, this relatively minor adjustment in the capital structure of banks would significantly alter the incentives of debt holders, banks, and regulators, and, as a result, the disciplinary influence to which banks are subject. Since debt holders could not demand repayment prior to the terms of the contract, they would continuously monitor bank behavior and demand a higher interest rate from riskier banks.28 Faced with this market discipline, banks would manage their risk positions more carefully and might find it worthwhile to return to holding higher levels of capital similar to those held prior to the introduction of deposit insurance.29

This relatively minor adjustment also would reduce significantly regulators' concerns about contagious deposit runs at poorly capitalized banks. These runs would be significantly decreased since debt holders could not run. Moreover, the new capital structure would influence behavior at the margin across all capital levels. Poorly capitalized banks could not profit from end-of-game behavior,30 and other banks would be forced to behave in a manner that reduces the likelihood of their falling into the under-capitalized category. Thus, both forces would serve to decrease concerns about contagion and improve the general health of the industry.

The true value of any new proposal, however, is measured by its success during times of stress. With an increased role for subordinated debt in the capital structure, continuous market discipline by debt holders would minimize moral hazard problems, thereby reducing the probability of bank failure. Even when banks approach insolvency, however, market discipline would be applied

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28. This proposal resolves two of the potential problems of market discipline raised by Garten, supra note 7, at 131. First, she claimed that depositors should not be expected to be good disciplinarians of banks because depositors rely on the liquidity of their deposits, rather than a thorough analysis of the behavior of the bank, to protect themselves from risk. That is, they will run from the bank at the first sign of problems instead of consistently applying risk managing discipline. Second, she claimed depositors hold positions at a particular bank for a number of reasons other than the expected return on the investment—e.g., convenience, personal relationships. Again, therefore, most depositors will not continuously monitor risk. While Macey & Garrett, supra note 8, at 224, take exception to these concerns, their arguments become moot if the proposal suggested here is implemented. Debt holders would view the funding entirely as an investment and their ability to run would be nonexistent. Therefore, rationally, they would continually apply the desired discipline.


30. See Barth & Bartholomew, supra note 24.
via a slow, methodical resolution process during which maturing debt would become progressively more difficult to roll over. Instead of having a sudden run on deposits, the increased role of subordinated debt essentially would create a soft landing. This debt cushion would protect the insurance fund (and the taxpayer) regardless of the extent of deposit insurance coverage. With the debt proposal in place, market refusal to accept new debt as outstanding issues came due would signal a solvency problem. Once a bank's debt capital fell below the required level, its remaining subordinated debt holders would receive an equity position and have a specified period (e.g., 6 months) to recapitalize the bank or to find an acquiror; otherwise, the bank would be liquidated. This process of resolving solvency problems would occur in an environment in which regulators would continue restricting the activities and behavior of the bank as provided for in FDICIA.31

The threat of potential losses to the insurance fund would be decreased under this proposal because a specific group—the subordinated debt holders who are designated in this proposal—would be sensitive to, and have incentives to be informed of the risk positions of the banks and would act swiftly and at an early stage of a bank’s threatened decline into insolvency. Subordinated debt holders would absorb losses after equity is eliminated. These potential losses create strong incentives for debt holders to avoid forbearance, that is, allowing a bank to continue operating once its capital cushion is eliminated.32 With debt holders serving as an additional cushion against losses, depositors are less likely to withdraw deposits.33 Consequently, the most attractive feature of this

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33. A potential concern raised by my colleagues is whether depositors would actually be insulated from losses. This argument suggests asset values could deteriorate quickly, affecting depositors by eliminating the cushion provided by both the equity capital and subordinated debt. However, there is no evidence that this is how bank failures typically occur. The market value of assets do not change as quickly as this argument suggests. For example, while the decline in Texas land values in the 1980s is often given as an example of a swift deterioration of asset values, a review of the data over this period suggests that the decline actually occurred over a number of years. Additionally, none of the major bank failures of the past decade were really a surprise. Forecasters predicted the failures of First Republic, MCorp, Continental Illinois, and the Bank of New England well before regulators decided to step in and formally take action. An additional issue raised about the viability of the proposal concerns the desire and ability of small banks to issue subordinated debt. Some critics see the explicit interest costs paid on the debt as an additional burden on small banks. However, this view ignores the implicit costs of other forms of capital, such as retained earnings, and the tax advantages of having deductible interest payments. Responses from the industry suggest that small banks could issue the new debt. See, e.g., FERC REPORT, May 20, 1991, at 2. Discussions with investment bankers suggest there is a market for these debt instruments, and some have even indicated an interest in establishing mutual funds to invest in the subordinated debt of small banks. An alternative means of marketing the subordinated debt of small banks, utilizing capital note banks, is discussed in Paul Horvitz, A Free-market Approach to Saving Troubled Banks, AM. BANKER, Dec. 10, 1987,
III. Comparing Alternative Regulatory Reform Proposals

A major purpose of this Article is to contrast the workings of a regulatory structure emphasizing subordinated debt to Professor Mantripragada’s proposal—to provide insurance based on the maturity of deposits. The following will briefly contrast the debt proposal to alternative bank regulatory reform proposals and then it will focus on a detailed comparison with Mantripragada’s plan.

A. The Traditional Recommendations

Increasing reliance on subordinated debt in capital adequacy requirements should be superior or complementary to alternative reform proposals. Alternative proposals would attempt to adjust the incentive structure resulting from mispriced deposit insurance (flat-rate premiums, until very recently) by introducing private insurance, co-insurance, or risk-based premiums. Certain

at 4. Additional conversations with bankers suggest they could issue the debt relatively easily. In fact, for many small banks, issuing subordinated debt would probably be preferable to issuing equity. For closely held institutions, new equity issues could significantly dilute the control of existing shareholders or the issues could carry an unattractive price because of the minority role they would entail. In any case, if the debt issuance cost for small banks were considered excessive (a presumption which is not at all obvious given the sophistication and depth of securities markets, but one which requires additional analysis), a possible modification to the proposal would be to exclude small banks from the requirement. For example, it is possible to limit the proposal to institutions with over one billion dollars in assets and/or to banks wishing to utilize expanded bank powers. Tying the proposal to expanded powers could eliminate the concern of those who fear that expanding product powers under the current deposit insurance structure would threaten the solvency of the insurance fund. This modification, which is not being recommended, would probably have little impact on the effectiveness of the proposal.

34. The merits of these alternative proposals have been extensively debated. A discussion of private deposit insurance is provided in Catherine England, A Proposal For Introducing Private Deposit Insurance, 21 PROC. CONF. ON BANK STRUCTURE & COMPETITION, FED. RESERVE BANK OF CHICAGO 316 (1985) and Bert Ely, Yes—Private Sector Deposit Protection is a Viable Alternative to Federal Deposit Insurance, 21 PROC. CONF. ON BANK STRUCTURE & COMPETITION, FED. RESERVE BANK OF CHICAGO 338 (1985). A co-insurance proposal is developed in Herbert Baer, Private Prices, Public Insurance: The Pricing of Federal Deposit Insurance, ECON. PERSP., FED. RESERVE BANK OF CHICAGO 45 (1985). A recommendation to lower the level of insurance coverage has been offered in Volcker, supra note 11, at 22, and implicitly in U.S. DEPARTMENT OF THE TREASURY, supra note 29. Risk-based premiums were evaluated in Macey & Garrett, supra note 8, at 238; Flannery & Protopapadakis, supra note 17; Robert Avery et al., An Analysis of Risk-Based Deposit Insurance For Commercial Banks, 21 PROC. CONF. ON BANK STRUCTURE & COMPETITION, FED. RESERVE BANK OF CHICAGO 217 (1985); and Paul Horvitz, The Case Against Risk-Related Deposit Insurance Premiums, 2 HOUSING FIN. REV. 253 (1983). Background information and a “narrow bank” proposal are presented in Robert Litan, Evaluating and Controlling the Risks of Financial Product Deregulation, 3 YALE J. ON REG. 1 (1985) and ROBERT LITAN, WHAT SHOULD BANKS DO? (1987). Early closure proposals are summarized in Shadow Financial Regulatory Committee, AN OUTLINE OF A PROGRAM FOR DEPOSIT INSURANCE AND REGULATORY REFORM, Statement 41, February 1989, and GEORGE BENSTON & GEORGE KAUFMAN, RISK AND SOLVENCY REGULATION OF DEPOSITORY INSTITUTIONS: PAST POLICIES AND CURRENT OPTIONS (1988).
proposals, such as the "narrow bank" alternative, would limit insured banks to a very narrow array of services and require those banks to lodge any additional services in an uninsured affiliate. Another approach contemplates increasing regulatory intervention through increased capital level requirements or early closure rules to protect the government insurance fund and taxpayers from losses during financial "rescues." The Shadow Financial Regulatory Committee supported this approach for a number of years, and Congress partially incorporated it into FDICIA.

Most of the alternative proposals strive to increase reliance on market forces to oversee bank behavior. The subordinated debt proposal similarly relies on the oversight of market forces, but without risking the much feared side effects of deposit runs. Additionally, this proposal eliminates the preferential treatment of uninsured depositors at "too-big-to-fail" banks. The subordinated debt proposal also achieves the benefit of early closure in minimizing losses to the insurance fund more effectively. With early closure, regulatory discipline constrains bank behavior as its capital falls toward a certain threshold; regulators finally close the bank at some positive level of net worth. The subordinated debt proposal, on the other hand, eliminates regulators' need to set an arbitrary threshold and rather continuously applies increasing pressure on banks to manage risk as their capital position deteriorates. Allowing banks to feel this pressure early makes them less vulnerable to encountering financial difficulty. Regulators can implement an orderly work-out procedure once they determine that a bank's capital has fallen to some unacceptable (but positive) level. Banks will be less likely to postpone recapitalization under the debt proposal than under a supervisor-imposed early closure rule based on regulator-estimated firm value. Furthermore, the debt proposal appears more politically palatable than reducing deposit insurance coverage and more easily implemented than risk-based insurance premiums. Finally, it should be emphasized, however, that the subordinated debt proposal is not mutually exclusive of and actually complements most of the alternative proposals. For example, regulators could use the market-determined debt prices to indicate which institutions were in most need of supervision. Additionally, if regulators used risk-based insurance premiums, they could use the subordinated debt prices as the basis for the premium differentials.

**B. Depositor vs. Subordinated Debt Holder Discipline**

Professor Mantripragada realized the potential problems resulting from increased reliance on the market discipline of large-dollar depositors and questioned whether depositor discipline was as effective as other sources of market discipline.\(^{35}\) He recommended that insurance be based on the maturity

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of the deposit rather than the size of the deposit. This Section now compares the merits of using depositors with using debt holders, as sources of market discipline.36

1. Depositor-Induced Discipline Creates the Potential for Disruptive and Socially Expensive Bank Runs37

A major problem with using depositors as the source of market discipline is the "razor's edge" dilemma discussed earlier. Although the threat of a bank run induces the bank to manage its assets more effectively, an actual run can disrupt banking activities and possibly lead to systemic problems. In the past, fear of a systemic breakdown led regulators to insure the balances of all depositors, regardless of the level of de jure coverage. In a system where subordinated debt holders are the major source of discipline, the potential for systemic failure is decreased significantly since debt holders cannot run; they can only "walk" as successive issues of debt mature.

2. Depositors May Not Have Adequate Information to Provide the Necessary Discipline to Bank Behavior38

Critics have argued that depositors should not be relied upon as the principal source of market discipline since they lack access to monitoring information and are not typical investors.39 In contrast, subordinated debt holders are investors and, as such, closely analyze investment risks.40 Although subordinated debt holders already have a significant disciplinary role in the investment community, their role as a major bank disciplinarian would effectuate itself since debt holders would seek, or demand, additional financial

36. The issues considered were all raised by Mantripragada in his discussion of the effectiveness of market discipline.  
37. See Mantripragada, supra note 3, at 554.  
38. Id. at 559-60.  
39. Id.; Garten, supra note 8; Garten, supra note 35.  
information from banks. This type of financial reporting would be similar to
the pre-federal deposit insurance environment in which depositors demanded
detailed information from banks. The marketplace will penalize banks that
provide inadequate information via a price differential on their debt.

Although some commentators question whether debt holders can impose
adequate discipline on banks, economic theory suggests they would. Being
at risk, debt holders have an incentive to monitor and influence the viability
of their investment. Before successfully rolling over a debt issue, a bank must
convince potential buyers that it is capable of repaying the debt and interest
charges. More importantly, the market appears to have the ability to
differentiate between banks of different quality. Subordinated debt rates
currently offered by different bank holding companies differ substantially, and
new bank stock issues are introduced periodically based on the same market
information that would be available to debt holders. Ending bank supervisors'
current restrictions on information disclosure would further enhance the
market's ability to discipline banks. Moreover, even in the unlikely event that
debt holders were unable to differentiate between banks with respect to quality,
or when their investment decision turned out to be imprudent, debt holders
would still serve as an additional cushion to the insurance fund.

This investment mentality is what distinguishes debt holders from depositors
as a source of discipline. Debt holders who made a deliberate decision to bear
risks would incur the losses, rather than, as has been all too common,
unsuspecting depositors or irresponsible taxpayers.

3. It is Difficult to Determine the "Appropriate" Level of Deposit
Insurance Coverage, Particularly Without a Plan to Ensure that
Conditions Will Exist for Effective Depositor Monitoring

A key factor in the proper management of the "razor's edge" of bank
regulation through depositor discipline turns on the determination of the level
of deposit insurance coverage. Ideally, depositors must apply discipline, but not
too much. However, there is no need to attempt to achieve this delicate balance
when subordinated debt holders serve to discipline bank behavior and as a

41. For an early example of the effectiveness of the market in demanding information from financial
institutions and in imposing market discipline, see Charles C. Calomiris, Getting the Incentives Right in the
Current Deposit Insurance System: Successes from the Pre-FDIC Era, in THE REFORM OF FEDERAL DEPOSIT
INSURANCE 13 (James R. Barth & R. Dan Brumbaugh, Jr., eds., 1991); Charles Calomiris, Is Deposit
Insurance Necessary? A Historical Perspective, Vol. L, No. 2 J. ECON. HIST. 28 (June 1990); Charles
Calomiris, Do 'Vulnerable' Economies Need Deposit Insurance: Lessons from the U.S. Agricultural Boom
and Bust of the 1920s, in IF TEXAS WERE CHILE: A PRIMER ON BANKING REFORM at 237 (Philip L. Brock,
ed., 1991); George Kaufman, Banking Risk in Historical Perspective, STAFF MEMORANDA, FED. RESERVE
BANK OF CHICAGO, SM86-3 (1986); BENSTON ET AL., supra note 7.

42. For a review of some of the relevant empirical work, see R. Alton Gilbert, Market Discipline of
Bank Risk: Theory and Evidence, ECON. REV., FED. RESERVE BANK OF ST. LOUIS, Jan.-Feb. 1990 at 3;
Macey & Garrett, supra note 8.

43. See Mantripragada, supra note 3, at 557, 567.
cushion to the insurance fund. Along with eliminating depositor-induced bank runs without sacrificing market discipline, deposit insurance could again serve its original purpose of protecting the small depositor.

One of Mantripragada's major concerns, and justifiably so, was the absence of a movement to create the conditions necessary to enable depositors to act as effective bank monitors. Again, if debt holders serve as the source of discipline there would be no need for such a movement. Since the market for debt is already well established, and since debt issues recently have become an attractive alternative to equity issues, conditions already exist to support debt holders' serving as the major source of discipline.

4. Although FDICIA Attempted to Encourage the Increased Use of Market Discipline, Regulators Still May Find it Advantageous Not to Adhere to the "Spirit of the Law"44

There have been situations in the past when regulators have circumvented established regulatory guidelines or aspects of legislative mandates such as FDICIA. For example, regulators have intervened when financial institutions encountered difficulties, rather than allowing the imposition of market discipline. They have failed to enforce the prescribed resolution plan (e.g., $100,000 deposit insurance limits) at the very time that it was most needed. Repeated regulatory failure to enforce the "spirit of the law" prompted Congress to adopt rather uncharacteristically intrusive bank legislation that limited regulatory discretion and dictated how bankers should conduct their business.45 The regulators' hesitancy to adhere to deposit insurance limits obviously stems from the fear of systemic risk. One purpose of FDICIA was to increase reliance on market discipline and to choose the least cost resolution alternative when failures occur.

Recent events, however, suggest that the new legislation may have done little to curb regulatory circumvention of the "spirit of the law." In the recent failure of CrossLand Savings, FSB, the FDIC chose to guarantee all depositors and to operate the bank in conservatorship. Despite the existence of private bidders and the apparent lack of systemic risk, the FDIC took interim control

44. Id. at 569, 573.
of the thrift with the intention of selling it within a two year period. Many observers perceived the FDIC's interim control as a breach of FDICIA's requirements of least-cost failure resolution. In fact, it has been argued that top regulatory officials have explicitly supported means to circumvent the "spirit of the law."  

Obviously, having a regulatory plan "on the books" but ignoring it when the time for implementation comes serves little productive purpose. The success of this Article’s proposal requires that debt holders react as if they are subject to losses; otherwise, they will exert no discipline on banks. Contrasting the subordinated debt proposal with alternative programs, however, under this proposal, regulators have less pressure to intervene because debt holders cannot initiate a run. There would be no need to choose between a too-big-to-fail policy (based on the fear of imposing losses on large customers or interbank accounts), or the systemic risk of contagious failures. Emotional concerns for situations in which "widows and orphans would stand to lose their life-long savings" would no longer apply. As sophisticated, arm's-length investors, debt holders understand both the potential gains and losses resulting from debt transactions.

Additionally, because banks are not subject to bankruptcy laws, subordinated debt holders could not bargain for a more senior stake by refusing to accept a proposed bankruptcy reorganization plan. They would truly be "subordinated." In the worst-case scenario they would start the methodical reorganization discussed earlier. But this is precisely what is needed—an orderly resolution process.

5. There May be Monetary Policy Implications of Encouraging Market Discipline

Increased use of market discipline could affect the monetary aggregates in two ways. First, if a bank failure occurs and losses are imposed on depositors, the components of the monetary aggregates that have been given "haircuts" will decline. This decline will occur for reasons other than monetary policy.


48. See Mantripragada, supra note 3, at 570.

49. Bank regulators introduced the term "haircut" to indicate that as bank losses are imposed on depositors they will not receive 100% of their deposits. The effect of these "haircuts" on the monetary aggregates would depend on the operating procedures of the central bank. If these operating procedures target the money supply, regulators can take appropriate steps to stabilize the supply as the need arises. However, this would affect interest rates. On the other hand, if the procedures targeted interest rates, rates will start to rise when deposits are eliminated. Regulators can nonetheless adjust the level of reserves to keep the rate at the desired level. This would affect money growth. The actual imposition of losses on depositors is not necessary to affect the aggregates. For example, failures in the savings and loan industry
Second, if bank runs occur as a result of increased market discipline by depositors and there is a flight to currency, the aggregates would change without a change in monetary policy. Neither of these effects is expected to be significant, and even if it were, the effect could be offset by the monetary authorities. Although flights to currency were common in the nineteenth century, flights to quality are much more likely today—that is, shifting funds to a healthy bank or shifting funds into government securities. Flights to quality do not affect the broader aggregates. Nevertheless, as a consequence of the reduced likelihood of systemic bank runs under the subordinated debt proposal, concerns about the effect of increased market discipline on the monetary aggregates would be lessened if subordinated debt served as the source of market discipline.

Conclusion

Little doubt remains that the U.S. financial services industry needs, and is beginning to undergo, significant regulatory reform. The events of the 1980s indicated that something was amiss with the federal safety net, particularly the deposit insurance schedule. Meaningful reform began with the passage of FDICIA which gave a larger role to market discipline. As noted by a number of scholars, however, depositor-imposed market discipline may be inherently problematic. Therefore, this Article offers an alternative plan that marginally changes the capital structure of banks and employs subordinated debt holders as the major source of market discipline.

This proposal offers numerous comparative advantages over other proposals. Fundamentally, it imposes the desired market discipline on the behavior of financial institutions without incurring the threat of bank runs. Subordinated debt holders have all the desirable characteristics of arm’s-length investors capable of imposing discipline on the banking system. As a result, market forces could more effectively control bank behavior. By doing so, the proposal addresses criticisms that the restrictions imposed by regulators under FDICIA

brought about the depletion of insurance fund balances. The losses were paid for by issuing securities to the public. One can also envision a situation where taxes would be raised to pay off the losses. Either of these means of paying for industry losses would result in the contraction of the monetary aggregates if interest rates were being targeted. See Paul Kasriel & Robert Laurent, Closing Depository Institutions and Fed-Funds Targeting: The Case of an Inadvertently Contractionary Monetary Policy, NORTHERN TRUST WORKING PAPERS SERIES 1 (1991); see also Paul Kasriel, How The Fed Subverts Its Rate Cuts, WALL ST. J., Dec. 23, 1991, at A8.


52. See Mantripragada, supra note 3. See also Garten, supra note 8; Garten, supra note 35.
are too intrusive\textsuperscript{53} and may result in the micro-managing of bank behavior to a point where banks become even less competitive in the financial services industry.\textsuperscript{54} The additional capital cushion and market discipline provided by the debt holders will lessen the need for intervention. Consequently, bankers may find this proposal preferable to the current regulatory framework.

This reform proposal may confer additional benefits on banks and the consuming public by stabilizing the regulatory environment. The restrictions imposed on regulatory discretion in FDICIA partly resulted from concerns that bank failures and significant losses to the insurance fund during the 1980s were attributable to lax regulatory standards. Regulators and bankers have expressed their concerns that the new legislation is too burdensome for banks and too restrictive on regulators.\textsuperscript{55} Allowing the marketplace a significant role in "regulating" the industry eliminates these concerns, decreases the need to address regulatory avoidance behavior,\textsuperscript{56} and creates a relatively stable regulatory environment.

As with many of the proposals currently being considered, modifying the role of subordinated debt in the bank capital structure should be phased-in over time. The staggered nature of the debt issues, which is required to impose continual discipline on banks, can easily accommodate this phase-in. Once fully implemented, the subordinated debt requirements will allow banks to determine their success in the marketplace by competing with their operating and managerial expertise. Currently, banks are competitively disadvantaged with respect to nonbank competitors due to regulatory restrictions designed to limit the distortions induced by deposit insurance and protect against systemic bank runs. Employing subordinated debt holders as a source of market discipline will remove that disadvantage and increase the health of the banking system.


\textsuperscript{55} Federal Reserve Chairman Greenspan stated that although he understood the reasons behind the legislation passed by Congress, he was concerned with its potential to eliminate regulatory discretion and move toward a "mechanical approach" to regulation. See Greenspan, supra note 53, at 2.

\textsuperscript{56} For a discussion of the bank regulatory process as one in which (1) regulations are imposed, (2) banks respond by discovering means to avoid the impact of the regulation, (3) imposition of additional regulations aimed at addressing this avoidance behavior are imposed, and (4) additional avoidance behavior by the banks occurs, \textit{ad infinitum}, see Edward Kane, \textit{Good Intentions and Unintended Evil: The Case Against Selective Credit Allocation}, 9 \textsc{J. Money, Credit \\& Banking} 355 (1977). See also Edward Kane, \textit{Accelerating Inflation, Technological Innovation, and the Decreasing Effectiveness of Banking Regulation}, 36 \textsc{J. Fin.} 355 (1981).