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Subordinated Debt: A Capital Markets Approach to Bank Regulation

Mark E. Van Der
Abstract: Banking organizations in the United States are growing larger; more complex and more diversified in their operations. As a result, bank regulators are becoming less able to understand and supervise their regulatory charges. The recently enacted Gramm-Leach-Bliley Act contributed to this trend by expanding the activities in which banks and their affiliates may engage. The authors argue that increasing the amount of market discipline to which banks are subject promises to remedy many of the shortcomings of government supervision and regulation. This Article proposes that large banks should be required to issue a minimum amount of long-term subordinated debt to third-party investors and sets forth a comprehensive subordinated debt program as a complement to government regulation of banks. Actual and prospective holders of bank subordinated debt will constrain bank risk taking roughly in accordance with the interests of the federal government and without the bureaucratic and other inefficiencies entailed in government regulation. Holders of bank subordinated debt, as they buy and sell bank debt securities in the secondary market and negotiate purchases in the primary market, will also signal to federal regulators the private sector's view as to the value of a bank's enterprise.

INTRODUCTION

On November 12, 1999, President Clinton signed into law the Gramm-Leach-Bliley Act, the most significant U.S. banking legislation in over sixty-five years. The Gramm-Leach-Bliley Act eliminates many long-standing federal and state law barriers to affiliations between banks and securities firms, insurance companies, mutual funds, and
other financial service providers. In so doing, the Act paves the way for a significant restructuring of the U.S. financial services industry and a modernization of the way financial services are offered in the United States. Tucked comfortably in the middle of Title I of the Gramm-Leach-Bliley Act is a provision that instructs the Federal Reserve Board and the Treasury Department to study the feasibility of requiring large banks and their holding companies to maintain a portion of their capital in the form of subordinated debt. This requirement is a way to bring market forces to bear on the operation of banking institutions and to reduce the risks that these institutions and their expanded activities may pose to the federal deposit insurance fund.

The Gramm-Leach-Bliley Act’s commission of a federal study of subordinated debt is the latest in a long series of calls from academics, regulators, and public officials for investigation into the potential benefits that market discipline—that is, using the private sector to monitor and regulate bank risk taking—may provide to the U.S. system of bank regulation. Since the 1980s, the academic literature has contained various proposals for using different forms of market discipline to supervise and regulate banking activities, and academic writers have suggested alternatively that depositors, nondeposit creditors and shareholders are the market participants best situated to monitor and regulate bank behavior. Several commentators have argued that

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2 Gramm-Leach-Bliley Act § 108.
3 See id. The Gramm-Leach-Bliley Act defines subordinated debt to mean unsecured debt that:

(A) has an original weighted average maturity of not less than 5 years; (B) is subordinated as to payment of principal and interest to all other indebtedness of the bank, including deposits; (C) is not supported by any form of credit enhancement, including a guarantee or standby letter of credit; and (D) is not held in whole or in part by any affiliate of the bank.

See id. § 108(c)(3).
subordinated debtholders are the preferred source of market discipline.\(^6\)

The use of market discipline, however, has not been without critics. Indeed, some commentators have contended that proponents of market discipline have not presented workable models that can achieve the goal of monitoring and curbing bank risk-taking activities.\(^7\) Other commentators have argued that, among potential market disciplinarians, subordinated debtholders are ill-suited to serve as monitors of bank behavior.\(^8\)

In light of the Gramm-Leach-Bliley Act's demand for a study of subordinated debt and in anticipation of the new financial world to be ushered in by the Act, this Article takes a fresh look at the market discipline debate. In this new era, in which banks and bank holding companies will be permitted to engage in a wide array of financial activities, the regulatory system will need to utilize market forces to help monitor the activities of banking firms. In short, banking organizations are becoming more complicated, and the government will need help in supervising these increasingly complex and geographically diverse institutions.

This Article concludes that a properly structured subordinated debt program can serve as an important source for constraining bank behavior and can complement federal and state supervision and examination efforts.\(^9\) This Article formulates a properly structured sub-

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\(^6\) See Douglas D. Evanoff, Preferred Sources of Market Discipline, 10 YALE J. ON REG. 347, 358–60 (1993); Gary Gorton & Anthony M. Santomero, Market Discipline and Bank Subordinated Debt, 22 J. MONEY, CREDIT & BANKING 119, 127 (1990); Larry D. Wall, A Plan for Reducing Future Deposit Insurance Losses: Puttable Subordinated Debt, FED. RES. BANK OF ATLANTA ECON. REV., Aug. 1989, at 2; see also Meyer, Conf. on Reform, supra note 4 (noting that requiring banks to issue subordinated debt is “a particularly attractive means” for providing increased market discipline).


\(^8\) See, e.g., Gouvin, supra note 5, at 322–23.

\(^9\) This Article refers consistently to “banks” as a short form for all federally insured depository institutions, whether organized as national or state banks or federal or state-chartered savings associations. Indeed, with regard to the requirements of the subordinated debt program proposed in this Article, there is no reason why one class of depository institutions (banks) should be treated differently from another (savings associations).
ordinated debt program, which program we believe to be the most detailed and workable proposal to-date for the issuance of subordinated debt by banks. In reaching this conclusion, this Article also evaluates the arguments made by both opponents of market discipline and proponents of forms of market discipline other than subordinated debt.

The first Part of this Article examines a predicate question: What is it about banks that causes the government to regulate and supervise them and makes us carefully consider alternative methods of supervision and regulation? Part II looks at the current approaches to banking regulation and supervision and highlights the significant limitations of these approaches. Part III examines the ways in which market discipline may complement existing bank examination and supervision, and it assesses alternative sources of market discipline. Part IV contains our detailed proposal for using subordinated debt as the source of market discipline. Part V lays out some of the benefits of using subordinated debt, especially in light of the financial reforms brought about by the Gramm-Leach-Bliley Act. Finally, Part VI responds to the concerns and questions raised by commentators about market discipline in general and subordinated debt in particular.

I. Why Do We Need to Regulate Banks?

Despite two decades of deregulation, banks remain subject to a uniquely complex and intrusive regulatory scheme, one that makes banking one of the most comprehensively regulated industries in the American economy. For example, federal law restricts the ownership of banking organizations, places limits on the activities and invest-

The business of banks and thrifts, although historically different, is today quite similar and the failure of both types of institutions gives rise to largely the same systemic risks and exposes the federal safety net to the same potential liability. See, e.g., Ira L. Tannenbaum, The Unitary Thrift Holding Company and the Thrift Charter after the Gramm-Leach-Bliley Act, BANKING POL'y REP., Dec. 20, 1999, at 13-15.


11 See, e.g., 12 U.S.C. §§ 1817(j) (1994 & Supp. II 1996) & 1842(a) (1994) (providing that no individual, group of individuals or company may acquire control of a bank or bank holding company unless the acquisition has been approved by federal regulators). Federal regulators typically examine such factors as the competence, experience and financial ability of the potential acquirer. See id. In addition, until recently, federal law barred banks
ments of banking organizations and requires banking organizations to maintain certain prescribed levels of capital. Before examining the potential benefits of increasing the amount of market discipline to which banks are subject, it is necessary to answer a predicate question: Why do we regulate and supervise banks? Or, to be more precise, why do we employ a regulatory strategy in banking that is so different from the approach used in supervising other firms and even other financial intermediaries?

Ultimately, the answer is that we subject banks to unique levels of regulatory scrutiny and supervision in order to prevent—or, more accurately, to minimize the potential adverse effects of—bank failures. Firm failure is, of course, in no respect unique to banking. In fact, in the context of other industries and the economy as a whole,
the failure of firms generally is regarded as healthy and beneficial. Failure serves the useful cleansing function of eliminating mismanaged, noncompetitive and obsolete institutions, and diverting their resources to enterprises that can more efficiently utilize them. Bank failures, however, have been and currently are viewed differently because: (1) banks are uniquely susceptible to failure, and even banks that are well managed face unpredictable risks of sudden failure; (2) individual bank failures may pose significant systemic risks to other banks, other segments of the economy, and to the economy as a whole; and (3) under the current system of federal government guarantees, which were designed to mitigate the individual and systemic risks of bank failure, the direct cost of bank failures may fall not merely on the institutions that fail but also on all federal taxpayers.

A. Susceptibility to Failure

Banks have capital structures that make them uniquely susceptible to failure. Banks are distinctive in that they tend to have relatively little equity when compared to other firms—banks tend to receive ninety percent of their capital funding from debt. Moreover, a significant portion of that debt is in the form of transaction accounts, which are payable on demand at par and are readily transferable by the accountholder to third parties. A high percentage of bank assets, however, are in the form of relatively illiquid commercial loans or

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18 By contrast, the debt of most firms comes due at some scheduled time in the future. See, e.g., Jerrie L. Chiu, Note, Introducing Market Discipline into the Federal Deposit Insurance System: O'Melveny & Myers v. FDIC., 1 CONN. INS. L.J. 197, 204–05 (1995).
mortgages.\textsuperscript{19} No other financial intermediary combines such a potentially dangerous mix of highly liquid liabilities and illiquid assets.\textsuperscript{20}

The asymmetry of the maturity structure of bank assets and liabilities makes banks especially vulnerable to liquidity crises. If a substantial portion of a bank's depositors wish to withdraw their money at the same time, commonly referred to as a bank "run," the bank would face an immediate and severe liquidity crisis that could be fatal to the institution. The bank might be forced to liquidate assets, even profitable ones, quickly and at discounted prices. If that liquidation effort and other efforts to raise cash (such as interbank borrowing) proved unsuccessful in stopping the run, the bank would have to close.

Bank runs represent a classic prisoner's dilemma. Depositors, as a whole, are better off if they do not simultaneously seek to withdraw their money from a bank. Individual accountholders, however, are better off adopting a "me-first" attitude. Being among the first to withdraw funds from the bank increases the chances that the depositor will get his or her money before the bank's ability to obtain cash is exhausted and the institution must close its doors.\textsuperscript{21} Accordingly, once they begin, bank runs tend to take on a life of their own.\textsuperscript{22}

A bank run may occur because the public receives news that the institution is facing a significant loss or that bank management has engaged in fraudulent activities. Bank runs also can occur for a variety of reasons that have nothing to do with whether the institution is solvent or well-managed.\textsuperscript{23} Bank runs may even occur when the public receives misinformation about the financial or managerial condition of a bank.\textsuperscript{24} In fact, inaccurate information may crowd out the truth;


\textsuperscript{20} See Fischel et al., supra note 10, at 306-07. By contrast, mutual funds hold liquid assets and have liquid liabilities; pension funds have illiquid assets and illiquid liabilities. See id. at 306.

\textsuperscript{21} See, e.g., id. at 307-08; Macey & Miller, Bank Failures, supra note 16, at 1156-57; R. Mark Williamson, Regulatory Theory and Deposit Insurance Reform, 42 CLEV. ST. L. REV. 105, 112 (1994).

\textsuperscript{22} See Garten, What Price Bank Failure?, supra note 7, at 1169. Today, the federal government's support system for banks and their depositors alleviates the danger of runs. See infra text accompanying notes 33-38.

\textsuperscript{23} See Garten, What Price Bank Failure?, supra note 7, at 1168-69.

\textsuperscript{24} According to some theory and evidence, accountholders and other market participants have less reliable information about banks and their assets than they do about other firms. See infra Part VI.A. The lack of reliable and easily understandable information about
informed depositors, who know that the information is false, cannot ignore the information merely because they know it to be erroneous. Rather, informed depositors must take into account the reaction of ill-informed accountholders in deciding whether to withdraw their money, as the actions of ill-informed accountholders may precipitate the fatal run. Accordingly, banks—even well-managed banks—are susceptible to failure due to liquidity runs in ways in which other firms and financial institutions are not.

B. Systemic Risks

Bank runs have been viewed as potentially troubling not only because of their capacity to harm otherwise healthy and well-managed banking institutions on an individual basis, but also because individual bank failures pose a systemic risk to the banking system and the broader economy. The classic concern is that a run at one bank may cause depositors at other banks to panic. Through contagion, a liquidity problem at one institution may spread to other depository institutions in the same town or region of the country and, in extreme crises, extend throughout the national banking system.
bank runs of this sort occurred periodically in the eighteenth century and the first half of the nineteenth century, prior to the advent of federal government deposit guarantees.\textsuperscript{28} The problem of contagion, although not confined to banking, is more severe in banking than in other industries.\textsuperscript{29}

Another systemic concern is that the failure of banks could have effects outside the banking industry. When banks face a significant demand for cash that cannot be satisfied through such means as interbank borrowing, banks must recall loans. The recall of good loans disrupts the productive financing of investments and use of assets by bank borrowers.\textsuperscript{30} In addition, banks facing a run on their deposits will be unwilling to extend additional credit to borrowers or to roll over existing lines of credit.

Bank failures also could potentially have significant macroeconomic effects because of the central position that banks, especially certain very large banks, occupy in our monetary and financial system. Although the significance of banks in the financial system has declined over the past few decades,\textsuperscript{31} the banking system still plays a key role in the money supply process. The stability of the electronic, large-dollar payment system, through which billions of dollars move daily, and the liquidity of the securities, financial derivatives and interbank funding markets are all dependent on the soundness and

Winter 1990, at 6. That caution would seem warranted because bank failures affect large numbers of small depositors, who will not necessarily be well informed and who may start runs at other banks regardless of the risks faced by such institutions. See supra note 24 and accompanying text.


\textsuperscript{30} See Diamond & Dybvig, supra note 25, at 401-02. Some commentators argue that, in this regard, the effects of the failure of a bank are no different than the effects of the failure of any other firm. See Fischel et al., supra note 10, at 312. These commentators point out that, in the same manner that the failure of a bank disrupts the activities of its borrowers, the failure of a manufacturing firm disrupts the businesses of its suppliers and customers. See id. Furthermore, if there are close substitutes for the failed bank's credit—either from other banks or from nonbank financial intermediaries—the bank's borrowers may not experience a significant disruption in their business activities due to the loss of bank credit. See id.

\textsuperscript{31} See Oedel, Puzzling Banking Law, supra note 15, at 537-42 (arguing that banks no longer serve such a critical macroeconomic role as to warrant special regulatory and supervisory treatment).
proper functioning of the banking system. Accordingly, the widespread failure of banks, or the failure of certain very large banks, could cause an unexpected disruption in the money supply, which certain empirical evidence suggests could lead to dislocations in the economy that may worsen, or even cause, an economic downturn.

C. Federal Safety Net

Most of the fears about bank runs and systemic contagion were alleviated with the advent of the federal "safety net," the key elements of which were put in place as a result of the banking panics of 1907 and 1929 and the Great Depression. The safety net, which places the full faith and credit of the United States behind the banking system, has three primary elements: (1) federal insurance of bank deposits up to $100,000; (2) access for banks to emergency cash through the Federal Reserve's discount window; and (3) access for banks to the Federal Reserve's payment system. With deposit insurance, most account holders no longer face a prisoner's dilemma in a bank run, as they know that the federal government will back the deposits that they hold in a bank (up to $100,000) regardless of the health of the institution. Access to the discount window gives banks facing temporary liquidity crises—due to unexpected withdrawals, operational problems or various factors outside the bank's control—a means of meeting depositors' cash demands without liquidating assets. The Federal

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34 Professors Friedman and Schwartz credit federal deposit insurance with virtually eliminating bank runs and contributing greatly to monetary stability. See FRIEDMAN & SCHWARTZ, supra note 28, at 440–42. Recent banking panics have occurred in situations where federal deposit insurance did not exist. See Macey & Miller, Bank Failures, supra note 16, at 1158 n.18. For example, in the 1980s, panics occurred among state-chartered, non-federally insured depository institutions in Ohio and Maryland. See id. While federal deposit insurance can be credited with eliminating bank runs, federal insurance also has had the detrimental effect of eliminating depositor monitoring of bank risk taking. See infra text accompanying notes 44–47.

35 See, e.g., PURPOSES & FUNCTIONS, supra note 33, at 48; Macey & Miller, Bank Failures, supra note 16, at 1158.
Reserve's payment system ensures riskless settlement of financial transactions.\textsuperscript{56}

The safety net, which is a strong prophylactic for bank runs, has in itself given rise to another reason—and, in the minds of many commentators, the only valid reason—for bank regulation and supervision.\textsuperscript{37} The federal government, and thereby the federal taxpayer, is now ultimately responsible for bank deposits and the orderly functioning of the banking system and has a direct financial stake in keeping bank risks under control. The government's interest is akin to that of a private insurance company, which has a stake in controlling the risks of its policyholders.\textsuperscript{38}

II. INADEQUACIES OF THE CURRENT APPROACH TO BANK REGULATION AND SUPERVISION

As described in the previous Part, the federal government has created a safety net to reduce the incidence of bank failures and the systemic shocks that may accompany such failures. That safety net, however, creates incentives for excessive risk taking by banking organizations. The safety net also eliminates many of the incentives for private-sector monitoring of banks' risk-taking activities. The government relies principally on regulation and supervisory oversight as a surrogate for private-sector monitoring of bank activities and disciplining of excessive bank risk taking. This public-sector apparatus, however, is both less efficient and less effective than a system that utilizes market-based disciplinary forces.

The federal safety net, in general, and deposit insurance, in particular, have created a twin set of problems. First, the safety net gives rise to a "moral hazard" problem, one that is common to all types of insurance.\textsuperscript{39} The safety net creates incentives for banks to take larger

\textsuperscript{56} During the bank panic of 1907, cash payments were suspended throughout the country as many banks and clearinghouses refused to clear checks drawn on certain other banks, a practice that led to the failure of otherwise solvent banks. See Purposes & Functions, supra note 33, at 93.

\textsuperscript{37} See, e.g., Macey & Miller, Bank Failures, supra note 16, at 1162.

\textsuperscript{38} See, e.g., Meyer, Univ. of Tenn., supra note 32.

\textsuperscript{39} See, e.g., id. The moral hazard concept is a straightforward one; if a person bears the risk of a loss, that person will take affirmative steps to limit the risk of that loss—either by being more careful or reducing the level of the particular activity to an efficient degree. On the other hand, when a person is insured against the loss, the person lacks incentive to take steps to mitigate the risk of that loss. This lack of incentive to mitigate risks is the moral hazard. See, e.g., Chiu, supra note 18, at 203; William Safire, Moral Hazard, N.Y. Times Mag., Dec. 20, 1998, at 30.
risks than they otherwise would because the rewards of any gamble accrue principally to the bank’s management and owners but the risks fall largely on the safety net.40 This same problem of excessive risk taking exists in the private insurance context. There, insurers use contractual devices, including risk-adjusted premiums, deductibles and co-insurance, to limit the risk taking of insured entities. The federal government has tried to implement some of these devices, but with only limited success.41 Instead, the government has relied largely on supervision and regulation.

Second, at the same time as it leads to increased risk taking by banks, deposit insurance leads to reduced monitoring and sensitivity to risk on the part of creditors, shareholders and managers—the three corporate constituencies that, in the normal firm setting, monitor and manage the risk profile of an enterprise. In the usual corporate setting, creditors have a powerful incentive to monitor firm risks. Creditors are the most risk averse of the three corporate constituencies because they are entitled to a fixed rate of return. Accordingly, debtholders oversee the activities of an enterprise to ensure that the firm’s ventures produce a reliable stream of income to permit payment of interest and principal on the debt but do not involve a

40 See, e.g., Fischel et al., supra note 10, at 314; Williamson, supra note 21, at 120–21; Meyer, Univ. of Tenn., supra note 32. In fact, some commentators have argued that it was expressly for this purpose that the safety net and deposit insurance were designed: to persuade cautious Depression-era bank managers to make risky business and agricultural loans and, thereby, alleviate the severe credit crunch of the 1930s. See Garten, Whatever Happened, supra note 17, at 758–59.

41 For example, in 1991, Congress passed the Federal Deposit Insurance Corporation Improvement Act (“FDICIA”), Pub. L. 102–242, 105 Stat. 2236 (1991) (codified in scattered sections of 12 U.S.C.), which substituted a risk-adjusted federal deposit insurance premium for the then-existing flat-rate premium on deposit insurance coverage. Some commentators have noted that the use of risk-based deposit insurance premiums, if accurately priced, would eliminate the moral hazard of deposit insurance and serve as a substitute for forms of market discipline. See Chiu, supra note 18, at 209.

For risk-based deposit insurance to work, the insurance premium must be accurately priced to reflect the riskiness of a bank’s activities. One commentator has cautioned against viewing risk-based premiums as a panacea because the establishment and maintenance of an insurance pricing scheme that accurately reflects an institution’s risk profile is a “formidable task.” Williamson, supra note 21, at 122–23; accord Fischel et al., supra note 10, at 316 (noting that calculation of risk-based premiums requires additional expenditures on information and personnel).

Evidence suggests that, in any event, risk-based premiums are not being used currently to limit the risk-taking activities of banks. For example, for the first half of 1998, virtually no banks were assessed insurance premiums. Similarly, in the second half of 1998, only 577 of over 10,000 (fewer than 6%) FDIC-insured depository institutions paid a risk-based premium. See Scott Barancik, FDIC Premiums to Remain at Zero for Nearly Everyone, Am. Banker, Oct. 28, 1998, at 3.
significant risk of loss that may interfere with the firm’s debt servicing obligations.°

Equityholders and managers (who are often equityholders themselves) tend to be more accepting of risk than debtholders, because equityholders and managers stand to gain—either through capital appreciation, increased dividends or increased compensation—if risky ventures succeed. Equityholders and managers, however, cannot afford to ignore the risk preferences of creditors because doing so could cut the firm off from reasonably priced debt funding. In fact, the willingness of equityholders and managers to enter into agreements with debtholders that limit risk taking, such as restrictive debt covenants, may serve as a signal to other (debt and equity) investors of the firm’s prudent risk posture.° By contrast, an enterprise with a reputation for excessive risk taking or poor risk management will likely need to pay a premium for debt financing, which will reduce the resources that the firm has available to pay dividends to equityholders and bonuses to management. In more extreme situations, excessive risk-taking activities may make it difficult or impossible for the firm to attract and retain business creditors, and the exit of creditors from a firm may precipitate the firm’s collapse.°

Deposit insurance shelters banks from the disciplinary forces that exist in the ordinary corporate setting. Depositors—the largest group of bank creditors—have little incentive not only to guard against excessive risk taking, but even to police management self-dealing, defalcation or fraud because the funds that most depositors lend to banks are guaranteed by the Federal Deposit Insurance Corporation (“FDIC”)°; the FDIC provides guaranteed coverage at least up to

° Debtholders typically do not have representation on a corporation’s board of directors. See Oliver Williamson, Corporate Governance, 93 YALE L.J. 1197, 1211-12 (1984). They monitor firm activities through contractual devices and regular oversight of borrower affairs. See id. (describing the manner in which lenders protect their interests); see also infra Part III.C.


° See, e.g., George G. Triantis & Ronald J. Daniels, The Role of Debt in Interactive Corporate Governance, 83 CAL. L. REV. 1073, 1085-86 (1995) (describing how creditor exit can create a sense of urgency to motivate bank management and shareholders to take corrective action).

° See, e.g., Chiu, supra note 18, at 211-12; Macey & Miller, Bank Failures, supra note 16, at 1167. Professor Garten posits that in the past two decades insured deposits have decreased as a percentage of bank assets, and banks have turned to alternative funding sources, including repurchase agreements and Eurodollar and foreign deposits. See Garten, Whatever Happened, supra note 17, at 759-60. The statistics bear out Professor Garten’s theory. See infra note 78. According to Professor Garten, these alternative funding sources
$100,000. Large uninsured depositors also have little incentive to monitor banks because the risk of loss to even uninsured depositors has been slight. In the past, the FDIC has paid large depositors an average of 99.5% of their funds regardless of the amount of their deposits.\textsuperscript{47}

The absence of creditor monitoring allows shareholders and management to be less concerned with risk. Shareholders and managers know that depositors, secure in the knowledge that their deposits are guaranteed by the FDIC, will not demand a premium for placing their funds in a risky bank. Moreover, if a bank approaches insolvency, debtholders will not function as a check on managers' and equityholders' proclivity to taking excessive gambles.\textsuperscript{48}

Theoretically, at least, the absence of debtholder monitoring need not be problematic. The regulatory scheme places government in the position that debtors typically occupy in the system of corporate governance. Government employs supervisory, enforcement, and other tools to regulate and monitor bank activities.\textsuperscript{49} Indeed, govern-

\textsuperscript{46} Depositors may use a variety of methods to obtain more than $100,000 of insurance coverage at a particular institution. For example, a husband and wife may secure up to $300,000 of insurance for deposits held at one bank by maintaining one account in the husband's name, one account in the wife's name and one joint account in both names. \textit{See} FDIC, \textit{Your Insured Deposit} (visited Feb. 22, 2000) <http://www.fdic.gov/deposit/deposits/insured/index.html>.

\textsuperscript{47} Chiu, \textit{ supra} note 18, at 211; \textit{see also} Macey & Miller, \textit{Bank Failures}, \textit{ supra} note 16, at 1179 (noting how the FDIC's practices exacerbate the disincentives for depositors to monitor banks). In the 1980s, the FDIC developed a preference for resolving bank failures in a manner that ensured payment to both insured and uninsured depositors. \textit{See}, \textit{e.g.}, David A. Skeel, Jr., \textit{The Law and Finance of Bank and Insurance Insolvency Regulation}, 76 Tex. L. Rev. 723, 769 (1998). Congress attempted to curb this practice with the passage of FDICIA. \textit{See} \textit{id.} at 739-40, 770-71; \textit{infra} Part VI.B.

\textsuperscript{48} If deposit insurance were priced to reflect the riskiness of a bank's activities, shareholders and managers would likely be more concerned about the institution's risks. Riskier banks would be assessed higher premiums and, consequently, would have less money for stockholder dividends and management bonuses. \textit{See} Chiu, \textit{ supra} note 18, at 212-23. As noted above, however, over 94% of banks are not assessed any insurance premium. \textit{See} discussion in \textit{ supra} note 41.

\textsuperscript{49} For example, the federal banking agencies have broad powers to require "prompt corrective action" when a depository institution is undercapitalized. In addition, bank regulators may commence "cease and desist" proceedings against banks, their parent holding companies or certain of their affiliates if regulators determine that these institutions are engaging in unsafe or unsound practices. For a description of some of the enforce-
ment regulators and supervisors would appear to have the tools and resources to be better monitors than depositors and other private-sector creditors.\textsuperscript{50} Government regulators, who specialize in the trade of banking supervision and regulation, could be more adept at risk-monitoring than the average bank creditor and have a panoply of statutory and regulatory remedies to curb excessive risk taking and punish malfeasance that are not available to bank creditors.

Notwithstanding these apparent superiorities, the substitution of the public sector for the private sector creates a less efficient and less effective monitoring system. First, private-sector entities monitor firms at an efficient level; they monitor firms until the marginal costs of such monitoring are equal to its marginal benefits.\textsuperscript{51} Government regulation and supervision, on the other hand, is not subject to this calculus and is less likely to be as efficient. In some instances there may be excessive supervision and regulation,\textsuperscript{52} while in other situations there may be inadequate monitoring.\textsuperscript{53} Second, private-sector monitors have more reliable monitoring incentives. Private-sector monitors have their own money at risk and, therefore, have powerful

\footnotesize{\textsuperscript{50} Many commentators have argued that depositors would be poor disciplinarians. See \textit{Gallen}, \textit{Still Banking on the Market}, supra note 7, at 242–44. This Article discusses the relative merits of depositor discipline versus other forms of market-based discipline in Part III. infra.}

\footnotesize{\textsuperscript{51} See \textit{Macey} & \textit{Miller}, \textit{Bank Failures}, supra note 16, at 1167–68.}

\footnotesize{\textsuperscript{52} The U.S. bank regulatory structure is extraordinarily complex, with shared and overlapping jurisdictions for various federal and state authorities. This system creates the potential that a single bank holding company with multiple bank subsidiaries may need to deal with three federal bank regulatory agencies (the Federal Reserve, the Office of the Comptroller of the Currency ("OCC") and the FDIC) and an equal number of state regulators. For an example of how this system functions, see U.S. General Accounting Office, \textit{Report to the Chairman, Comm. on Banking, Housing and Urban Affairs, U.S. Senate, Interstate Banking: Benefits and Risks of Removing Regulatory Restrictions} 187–94 (1993). These overlaps can lead to comical results: Former Treasury Secretary Lloyd Bentsen was fond of telling an apocryphal tale that members of Congress often repeated about twenty-six examiners converging at a single bank location at one time so that their cars filled the parking lot and left no place for the bank’s customers. See \textit{Hearings on Interstate Banking and Branching before Subcomm. on Fin. Inst. Supervision, Regulation and Deposit Ins. of the House Comm. on Banking, Fiduciary and Urban Affairs}, 103d Cong. 15 (1993) (statement of Rep. Sam Johnson). For a discussion of how this intricate "Balkanized" system came to be, see sources cited in infra note 162; see also \textit{Meyer}, \textit{Widener Univ.}, supra note 27.}

\footnotesize{\textsuperscript{53} Insufficient government monitoring may be the result of inadequate or misallocated resources. See \textit{Macey} & \textit{Miller}, \textit{Bank Failures}, supra note 16, at 1169 (citing a former Chairman of the FDIC regarding the shortage of bank examiners and the serious threat to the safety and soundness of the banking system posed by this shortage).}
incentives to act with greater alacrity than public-sector bureaucrats. In addition, private-sector monitors have at their disposal contractual devices designed specifically for the purpose of causing borrowers to internalize the costs of risky activities. Such contractual devices are not available to government regulators, who instead need to rely on less precise and generally applicable regulatory requirements.54

The relative effectiveness of private-sector monitoring may be further enhanced by the singleness of purpose of private oversight. Private-sector investors have a single goal—protecting their investment—and their success or failure is measured solely by their ability to achieve this financial goal. Government regulators, on the other hand, may have political and other goals that temper their monitoring efforts. For example, political capture of a regulator by a regulated institution or industry may compromise the effectiveness of the supervisory and regulatory process.55 Alternatively, competition among the various bank regulators may lead to regulatory laxity, in the classic “race to the bottom” fashion.56 Political compromises also may give rise to statutory or regulatory restrictions that are unrelated to banking safety—such as the long-standing limitations on banks’ insurance and securities underwriting and dealing activities.57 These limitations, many of which were in place for over sixty years despite widespread acknowledgment that they served little or no safety and soundness purposes, needlessly barred banks from engaging in profitable activities and diversifying their risks.58

Finally, even regulators who are not distracted by competing goals and pressures may find effective oversight to be a difficult task, given the broad range of activities in which banks and their parent

54 See Fischel et al., supra note 10, at 315.
56 The recent failure of the First National Bank of Keystone, West Virginia highlights this problem. In this failure, which may cost the federal deposit insurance fund over $750 million, the OCC, the bank’s chartering authority, reportedly prevented the FDIC, the bank’s insurance examiner, from gaining access to the bank. See Marcy Gordon, Bank Failure Prompts Bid for Greater FDIC Power, CHICAGO TRIBUNE, Nov. 17, 1990, at B3.
58 See Garten, Regulatory Growing Pains, supra note 10, at 512–13; see also J. Virgil Mattingly & Kieran J. Fallon, Understanding the Issues Raised by Financial Modernization, 2 N.C. BANKING INST. 25, 37 (1998) (noting "general consensus" regarding the need to permit banking firms to engage in securities and insurance activities). Although this was the predominant view, there were a few dissenters. See Don More, Note, The Virtues of Glass-Steagall: An Argument Against Legislative Repeal, 1991 COLUM. BUS. L. REV. 433, 439 (taking a different approach from the "almost unanimous[] call . . . to replace Glass-Steagall").
holding companies engage.59 The size and complexity of banks severely tax the ability of bank regulators to engage in effective monitoring.60 Banks now routinely conduct a wide array of complicated derivative, securitization and other types of transactions to generate fee income and to manage risks. Moreover, the last few decades have seen the advent of truly global financial institutions that integrate a variety of banking and nonbanking businesses into the same multinational enterprise.61

The trend of financial conglomerization and product diversification will, if anything, accelerate under the framework established in the Gramm-Leach-Bliley Act, which permits banks to affiliate with securities firms, mutual funds, insurance companies, futures commission merchants and merchant banking firms. Broad, prophylactic rules that restricted the activities of banks and their affiliates—and which made monitoring bank activities more straightforward—have been swept away by the Gramm-Leach-Bliley Act. Under these increasingly complicated circumstances, using private-sector monitors to complement the efforts of government regulators is likely to result in better risk monitoring and control.62

III. Market Discipline: Benefits and Sources

The previous Part discussed some of the significant limitations of the current approach to bank regulation and supervision, which relies

59 For example, in the recent failure of the First National Bank of Keystone, there is evidence that bank examiners did not understand the complex activities of the bank. See Gordon, supra note 56.

60 See, e.g., Mantripragada, supra note 5, at 550 (noting that the "bank examination system has not kept pace with banking practices"); Meyer, Widener Univ., supra note 27 ("Technological change, financial innovation, the acquisition of new powers by banking organizations, the increasing geographic scope of banks, and the globalization of financial markets all challenge our ability to examine and assess the safety and soundness of individual banking firms.").

61 To cite one example, UBS AG, a Swiss bank, engages in the United States in leasing activities, trust company functions, providing financial and investment advisory services, securities brokerage and futures commission merchant services, securities underwriting and dealing, buying and trading bullion and related instruments, engaging in community development activities and acting as general partner for various investment limited partnerships. See UBS AG, Order Approving Acquisition of Nonbanking Companies and Establishment of U.S. Branches, 84 Fed. Res. Bull. 684 (1998).

62 To the extent that the government is less effective than private-sector parties in monitoring bank activities, banks are able to externalize some of the costs of their risky activities. See Fischel et al., supra note 10, at 315. Using market forces to complement the government regulatory and supervisory system will force banks to internalize the costs of their risky activities.
almost exclusively on the government to monitor bank risk taking. Many of these shortcomings in bank regulation can be ameliorated by an increased use of market discipline—that is, by heightening the ability of private providers of bank capital (stockholders, depositors or other debtholders) to influence bank behavior and to restrict excessive bank risk taking.

There are three ways in which market discipline promises to benefit the existing bank regulatory and supervisory structure. First, private suppliers of funds to a bank will constrain bank behavior through enforcement of contractual restrictions by debt investors and exercise of voting rights by stockholders. Regulators will be able to observe how the private sector responds to bank activities—such as what conditions are being imposed in debt contracts—and, thereby, determine what risks the market believes are material. Second, private actors that have already invested in a bank will punish inappropriate bank behavior by selling their shares or bonds in the secondary market. A declining share or bond price in the secondary market will provide a signal to bank management and to third parties, such as bank regulators, that an institution is moving in an unhealthy direction.63 Third, investors in the primary market that are contemplating an investment in a particular bank will exact a premium from a bank if they believe that the bank is engaging in risky activities.64

This Article proposes a program to enhance the market's ability to regulate bank behavior and thereby take advantage of the private sector as a watchdog. Use of private-sector monitors is necessitated by the enactment of the Gramm-Leach-Bliley Act, which permits banking organizations to engage for the first time in a broad array of new activities.65

63 The secondary market is the market in which existing securities are traded. The primary market is the market in which new securities are offered by a firm to investors for the first time.

64 Prospective providers of capital in the primary securities market are particularly adept reviewers of a company's behavior. When a company issues a new class of securities, new potential investors or investment banking concerns representing the new investors will scrutinize carefully the affairs of the issuer. As a consequence, a bank that must periodically enter the capital markets to obtain financing can be expected to behave prudently to obtain the approval of potential future investors. See Frank H. Easterbrook, Two Agency-Cost Explanations of Dividends, 74 AM. ECON. REV. 650, 653-55 (1984). Market participants corroborate this view. See BOARD OF GOV. OF FED. RES. SYST., STAFF STUDY NO. 172, USING SUBORDINATED DEBT AS AN INSTRUMENT OF MARKET DISCIPLINE 16 (1999) (hereinafter, USING SUBORDINATED DEBT).
The first step in designing a program that deploys private-sector resources to assist bank regulators is to determine which participant in the financial markets is in the best position to monitor bank activities and discipline high-risk banks. The first criterion for selecting this market participant is the participant’s ability to monitor and discipline banks effectively. The second criterion is the alignment or commonality of that participant’s interests with the interests of the federal government as bank regulator. The greater the commonality of interests between the market participant and the federal government, the greater the likelihood that the market participant will take the same posture as the government with respect to bank risk taking. Similarly, the closer the alignment of interests, the more information the government will be able to glean by observing the market participant’s behavior.

There are three potential private-sector contenders for this regulatory duty: equityholders, both common and preferred; depositors; and other creditors. We examine each in turn.

A. Equityholders

1. Common Stockholders

Holders of common stock have some natural advantages as disciplinarians vis-à-vis other market participants. First, common equityholders have a unique ability to monitor bank activities. They possess legal rights to inspect the books and records of a corporation, and equityholders in a publicly held company are entitled to receive periodic financial and other information about the corporation and its operations. More importantly, common stockholders have tools to enforce their will directly on a firm and its management. Common stockholders elect the directors of a company and, through the directors, appoint the company’s management and supervise its operations. If common stockholders do not approve of the conduct of their company, they can exercise their voting power to change the company’s directors, management and policies. Moreover, state corporate law generally confers upon the directors and officers of a corporation

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nature and to engage, upon a determination from regulators, in activities that are “incidental” to and “complementary” to financial activities).

a fiduciary duty to act in the interests of common stockholders and not in the interest of creditors or other corporate constituencies.\textsuperscript{67}

In addition, if equityholders are dissatisfied with the firm's performance, they generally have the right and ability to sell their stock in a publicly held corporation. An exodus of stockholders will create sell-side pressure on the corporation's stock price. Corporate managers, who themselves are typically stockholders, will act in the interests of stockholders to prevent such sales and the resulting decline in the company's stock price.

Despite these relative advantages, holders of common stock would not be the best purveyors of market discipline to banks, in part because their interests are not well-aligned with the paramount interest of the government in averting (or at least cabining the systemic and other risks of) bank failure. Common stockholders prefer higher-yield strategies than other corporate constituencies and the federal government.\textsuperscript{68} A bank's income must cover debt charges before it can be shared with equityholders and, while shareholders' risk of loss cannot exceed the amount they originally invested in the corporation, their potential gain is limited only by the size of the future earnings stream of the company.\textsuperscript{69} Consequently, the primary incentive of common stockholders, especially well-diversified stockholders, is to maximize the expected profitability of the companies in which they have invested—and not necessarily to limit risk taking.\textsuperscript{70}


\textsuperscript{68} See supra text accompanying notes 43-44.

\textsuperscript{69} Professors Macey and Miller point out that, prior to the advent of deposit insurance, a system of "double liability" was imposed on bank shareholders to force them to better monitor bank risks. See Macey & Miller, Double Liability, supra note 5, at 31. Under this system, if a bank failed, the institution's receiver would assess its shareholders an amount up to the par value of their stock so that shareholders would not only lose their initial investment in the stock but also lose a further sum out-of-pocket. See id.

The use of double liability to spur shareholder monitoring of bank risk would be unworkable in today's world, which Macey and Miller implicitly recognize. To begin with, double liability schemes would face numerous administrative problems: who is liable, how is the assessment to be enforced, what if the shareholder is outside the jurisdiction. Perhaps more importantly, imposing double liability on bank stockholders would increase the cost of capital to U.S. banks, placing them at a significant competitive disadvantage to their foreign counterparts and their non-bank competitors.

\textsuperscript{70} See Richard A. Brealey & Stewart C. Myers, Principles of Corporate Finance 59-62 (5th ed. 1996); see also John R. Hall et al., Do Equity Markets and Regulators View Bank Holding Company Risk Similarly? A Comparison of Market-Based Risk Measures and
Moreover, as a firm moves closer to insolvency, common shareholders may have additional incentives to encourage risky activities. In insolvency, shareholders stand last in line for repayment of their initial investment, and shareholders may not receive any portion of their investment on liquidation of the firm. Therefore, common shareholders of a distressed firm may prefer that the firm take greater risks to gamble its way back to solvency.\textsuperscript{71}

These risk preferences are not consistent with the primary goal of bank regulation. Thus, although shareholders have powerful incentives to monitor and influence bank behavior and the legal authority to supervise and control effectively such behavior, shareholders' motives are not sufficiently aligned with those of bank regulators.\textsuperscript{72}

2. Preferred Stockholders

Having determined that common shareholders are not a good source of market discipline, we next look to preferred shareholders as another possible class of equityholders that may exert discipline on banks. Preferred stockholders are more risk averse than their common stockholding brethren. Preferred stock generally is entitled to receive a fixed dividend and has a fixed preference upon liquidation of the company.\textsuperscript{73} For this reason, the incentive of a preferred stockholder is not simply to maximize the risk-adjusted profitability of the company but, rather, to ensure a steady and perpetual stream of preferred dividends. The incentives of preferred stockholders, therefore,

\textsuperscript{71} See Chin, \textit{supra} note 18, at 210; Triantis & Daniels, \textit{supra} note 44, at 1111.

\textsuperscript{72} Most banks, and certainly most large banks, are subsidiaries of holding companies. One commentator has argued that holding company shareholders can serve as market disciplinarians of their subsidiary banks. See Gouvin, \textit{supra} note 5, at 333–34. Bank holding companies—including new financial holding companies that were created by the Gramm-Leach-Bliley Act—are required by federal regulation to be a source of strength for their subsidiary banks and, as controlling shareholders of their subsidiary banks, can easily control bank behavior. See 12 C.F.R. § 225.4 (1998).

Nonetheless, holding companies are equityholders in their bank subsidiaries and therefore suffer from the same incentive misalignments described above. Holding companies probably suffer even more severe incentive misalignments than other bank shareholders because holding companies typically control other nonbanking companies and may have motivations to benefit their nonbank subsidiaries at the expense of their bank subsidiaries. See, e.g., Bevis Longstreth & Ivan E. Mattei, \textit{Organizational Freedom for Banks: The Case in Support}, 97 \textit{COLUM. L. REV.} 1895, 1896 (1997).

\textsuperscript{73} See Brealey & Myers, \textit{supra} note 70, at 360–61.
are more closely aligned with those of bank regulators. The incentives are not, however, aligned with the government as well as the interest of debtholders. The claims of a preferred stockholder are junior to the claims of all the creditors of a company, including, in the case of a bank, depositors and the FDIC. This ranking again gives preferred shareholders a greater incentive to allow bank risk taking because, in a liquidation, they will only be paid after all the creditors' claims are fully satisfied.

Preferred stock has three further disadvantages as an indicator of a bank's risk position that, along with the incentive misalignment, lead us to search elsewhere for the most efficient source of private discipline. First, preferred stockholders generally do not have voting rights; the ability of preferred stockholders to control the behavior of a company is limited to negotiated voting rights in the certificate of designations or other instrument creating the preferred stock. Second, holders of preferred stock are typically unsophisticated retail investors. Third, preferred stock is a relatively uncommon capital instrument that is rarely traded in a deep, liquid secondary market.

B. Depositors

The next class of private actors that is available to provide discipline is a bank's depositors. In many respects, depositors are a natural choice as a disciplining agent. First, they are a bank's most common stakeholder. In addition, depositors generally stand in a creditor-debtor relationship with a bank; they have loaned a sum of money to

74 See infra Part III.C.
75 See BREALEY & Myers, supra note 70, at 360-61.
76 See USING SUBORDINATED DEBT, supra note 64, at 45.
77 The lack of popularity of preferred stock stems, in large part, from the fact that it is not a tax-efficient capital instrument. A bank is not permitted to deduct preferred stock dividends from its taxable income, while a bank is permitted to deduct interest payments to its depositors or other debtholders. See BREALEY & MYERS, supra note 70, at 360-61; 26 U.S.C. § 163(a) (1994).
a bank and have a right to withdraw that money on short notice, perhaps earning interest during the period of the deposit. For this reason, depositors do not gain if a bank engages in risky behavior. Depositors benefit only if the bank is able to repay their deposits to them.

One significant problem with depositor-based discipline is that, under the current scheme of federal deposit insurance, most depositors—except for those uninsured depositors who have placed over $100,000 with a bank—have no incentive to monitor or influence a bank’s activities. If a bank fails, the federal government will fulfill the bank’s contractual obligation to return the depositors’ principal.79

Even if deposit insurance were abolished or significantly revised to lower the maximum amount insured or to require co-insurance or deductibles, depositors would not be the ideal agents of market discipline. Small depositors do not have the financial sophistication and acumen necessary to monitor bank activities, especially the types of complex financial transactions most likely to put an institution at risk, and collective action problems would inhibit joint action. Furthermore, each depositor would have so little at risk that it would make no financial sense for him or her to spend much time analyzing the riskiness of the bank. Co-insurance, a scheme in which depositors would have some money at risk, would give depositors greater incentive to discipline banks than in the current system but would still leave depositors with something less than an adequate motivation for watching their bank. In addition, many depositors are not investors; for such depositors, the convenience of a bank’s location or service menu is paramount.80 Finally, and perhaps most importantly, the monitoring benefits of depositors generally would be outweighed by

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80 See Helen A. Gallen, Banking on the Market: Relying on Depositors to Control Bank Risks, 4 YALE J. ON REG. 129, 134-36 (1986) [hereinafter Gallen, Banking on the Market]. Macey and Garrett argue that, in the absence of federal deposit insurance, riskiness will be one of the factors that depositors use in determining where to place their deposits. See Jonathan R. Macey & Elizabeth H. Garrett, Market Discipline by Depositors: A Summary of the Theoretical and Empirical Arguments, 5 YALE J. ON REG. 215, 223-24 (1988) [hereinafter Macey & Garrett, Market Discipline]. Nevertheless, the thrust of the argument remains: risk will be a secondary or tertiary concern of these depositors and their decisions will seldom actually turn on the riskiness of the bank’s investments and activities. See id.; see also Yvette D. Kantrow, Surprising Rivals Challenge British Bank Giants: Grocers, AM. BANKER, Jan. 14, 1999, at 1 (discussing how grocery stores in England are seizing deposits from banks).
the increased risk of bank runs and other adverse effects in a world without deposit insurance. 81

The typical uninsured depositor has more funds in the bank than the typical insured depositor and, one might expect, has a greater ability to monitor bank behavior. In addition, uninsured depositors have incentives analogous to those of the bank regulators—they want a bank to behave conservatively so as to ensure the return of their principal with interest. And, if a bank were to fail, the uninsured depositors stand immediately below the FDIC in the capital structure and insolvency waterfall of a bank. 82

Notwithstanding this close incentive alignment between uninsured depositors and government regulators, uninsured depositors would not be good disciplinarians of bank behavior. First, despite the size of their deposit accounts, uninsured depositors are not necessarily savvy investors; many of them are simply large manufacturing or other nonfinancial corporations parking liquid assets. These companies may not have the time or financial sophistication to monitor closely the riskiness of the bank in which their excess cash resides. They may choose a particular bank because of its location or range of business services, not because of the bank’s risk posture. For example, many businesses establish accounts at banks that are willing to extend credit to them. For most of these depositors, the transaction costs of changing banks are enough to prevent any shifting of deposits to take advantage of a risk differential. Second, uninsured depositors have no de jure control over the activities of a bank and probably have insufficient bargaining power—due both to the small size of their investments relative to the total assets of the bank and to the short-term nature of their investment—to obtain contractual controls over the

81 See supra Part I. Professor Mantripragada has proposed that deposit insurance coverage limits should be based on the maturity of the deposits rather than the size of deposits. See Mantripragada, supra note 5, at 571-73. Because long-term deposits are generally investments and are generally made by more wealthy and financially sophisticated individuals who are better capable of monitoring the relevant depository institutions, his proposal provides disciplining incentives to the depositors most capable of accomplishing the task. Also, because all short-term and transaction deposits would be insured, Mantripragada’s proposal theoretically would not increase the risk of bank runs. While this proposal would be an improvement over the existing deposit insurance scheme, it would not mitigate most of the concerns set forth in the textual paragraph. Most important among these is that even long-term depositors have a short time horizon as compared with the bank’s other stakeholders: stockholders and long-term debtholders.

activities of a bank. Third, uninsured depositors would be the first possible beneficiaries of a regulatory extension of the safety net in the event of bank insolvency. Even if regulators were able to commit not to bail out a bank's nondeposit creditors in the event of insolvency, uninsured depositors may yet believe that they would receive protection from the FDIC if their bank failed. Finally, uninsured depositors generally have short-term or demand deposits; they generally have the contractual ability to get their money back from the bank quickly and will be most inclined to do so when the bank most needs the deposits to stay put. This leads yet again to the specter of bank runs.

83 As of September 30, 1999, time deposits of $100,000 or more represented only 12% of U.S. insured commercial bank deposits, and 83% of such time deposits matured within one year. See FDIC, Statistics on Banking Third Quarter 1999, Table RC-5, Deposit Liabilities of FDIC-Insured Commercial Banks, (visited April 3, 2000) <http://www.fdic.gov/bank/statistical/statistics/9909/cbrc05.html>.

Macey and Garrett argue that, for some large depositors, pressuring bankers to reduce the risk profile of the bank or raise deposit rates would be cheaper than withdrawing their funds and finding another bank in which to invest. See Macey & Garrett, Market Discipline, supra note 80, at 230-31. This sort of influence is rarely attempted, however, because in most cases the costs of negotiating and monitoring are high and the costs of withdrawal and reinvesting elsewhere are low. See Garten, Banking on the Market, supra note 80, at 154-55.

84 See Skeel, supra note 47, at 169 (noting the FDIC's past practice of paying both insured and uninsured depositors); see also Charles W. Calamiris & Robert E. Litan, Federal Regulation in a Global Marketplace (unpublished paper presented at the Brookings Institute, on file with authors) (noting that, as consolidation in the financial services industry increases, more institutions will be deemed "too big to fail" and regulators will be "compelled" to bail out both insured and uninsured depositors should an institution run into financial difficulties).

85 See Garten, Banking on the Market, supra note 80, at 136-37, 153-55. Macey and Garrett argue that bank runs are not the only form of market discipline that depositors can employ. See Macey & Garrett, Market Discipline, supra note 80, at 229. They believe that banks, faced with the prospect of paying risk-adjusted interest rates to uninsured depositors, will hire risk management teams and adopt risk-aversion strategies to reduce the interest rates that they otherwise would be required to pay. See id. Banks may even agree to contractual commitments to uninsured depositors to reduce such rates. See id.

These ex ante benefits of depositor discipline, however, may be illusory. Risk policies and personnel can be changed at any time, and contractual commitments to avoid risk would likely be cost inefficient for a bank to negotiate with each depositor and cost inefficient for each depositor to enforce. This reality is highlighted by the fact that brokered certificates of deposit ("CDs"), which are almost always large and uninsured, are not purchased pursuant to any kind of contract containing commitments by the bank as to activity or investment policies. Professor Garten points out that short-term debt like commercial paper and CDs is not issued with covenants; the short-term nature of the instrument provides the protection, along with an active secondary trading market. See Garten, Still Banking on the Market, supra note 7, at 245-46.

Macey and Garrett also suggest that banks could contractually prevent bank runs by limiting depositors' right to withdraw their monies on demand. See Macey & Garrett, Market Discipline, supra note 80, at 231. Customers put much of their money in banks, however,
C. Other Creditors

Having concluded that none of the other private-sector actors is suitable, nondeposit creditors are the remaining potential source of market discipline. There are two classes of non-deposit creditors that may serve as market disciplinarians. The first class is comprised of short-term creditors, such as interbank and corporate creditors that supply funds, often on an overnight basis, to a bank. The second class is comprised of long-term creditors, such as holders of bank-issued debt securities.

1. Interbank and Other Short-Term Creditors

Interbank creditors are an intriguing, but ultimately unsatisfactory, source of creditor discipline.\(^{86}\) To be certain, interbank credit arrangements do provide banks with a reason to remain well-capitalized. A bank transacts with a host of counterparties that may not hold debt securities in the bank but, nevertheless, enter into contracts with the bank. The value of these contracts is contingent on the continued solvency of the bank.\(^{87}\) A counterparty entering into, for example, an interest rate swap with a bank becomes exposed to the credit risk of the bank and hence, one would expect, will charge a higher price to a bank that is in weak financial condition.

Interbank credit arrangements, however, are not good sources of market discipline. To begin, most interbank transactions are conducted pursuant to standardized contracts,\(^{88}\) and counterparties have little flexibility to impose special terms. In addition, because many interbank contracts have special bankruptcy priority\(^{89}\) and are short-

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\(^{86}\) See Oedel, supra note 5, at 402-09.

\(^{87}\) Interest rate swaps and securities repurchase agreements are examples. An interest rate swap is an agreement between two parties to exchange over time interest cash flows, based on a notional principal amount, calculated according to a fixed formula. See Federal Reserve Trading and Capital-Markets Activities Manual § 4325.1 (Feb. 1998). For example, Bank A might agree to pay to Bank B annually 8% of $1 million, while Bank B agrees to pay Bank A annually LIBOR plus 3% of $1 million. A repurchase agreement is an agreement between two parties where one party agrees to sell a security to the other party and agrees to repurchase the security from the other party at a fixed price at a specific date in the future. See id. § 4015.1.

\(^{88}\) See id. § 4325.1.

\(^{89}\) For example, the conservatorship and receivership provisions of the Federal Deposit Insurance Act provide for special treatment for "qualified financial contracts," which term...
term,\footnote{Eighty percent of repurchase agreements, for example, are overnight transactions. See \textit{Federal Reserve Trading and Capital-Markets Activities Manual} § 4015.1 (Feb. 1998).} bank counterparties have a reduced incentive to price contracts according to the bank's credit risk or to engage in significant monitoring of the bank's financial condition. For this reason, the price one bank charges another for a swap or other interbank credit arrangement is determined only in small part by the credit risk posed by the borrower.\footnote{The price of a securities repurchase agreement will, for example, depend more on the nature of the securities subject to the agreement and the relevant collateral arrangements than on the creditworthiness of the bank counterparty. Similarly, the price of a derivatives contract will depend principally on the nature, value and volatility of the underlying instrument.} Price signals, consequently, will be ambiguous and will not provide regulators with much information about the bank's risk posture.

2. Long-Term Creditors or Bondholders

Leaving interbank and other short-term creditors aside, we turn to the last potential source for market discipline: the bondholder or long-term creditor of a bank. In contrast to the other potential candidates, these debtholders are well suited to act as disciplinarians. Bondholders have interests that are closely aligned with those of government regulators, and they possess tools that enable them to monitor bank conduct and curtail bank risk taking.

Although long-term debtholders, unlike holders of common stock, are not entitled to elect their borrower's directors and do not have voting power over all of a bank's significant policy decisions, these debtholders routinely contract with their borrowers for at least negative control, or veto power, over the significant corporate decisions that might adversely affect the interests of the debtholders. For example, bond indentures and loan agreements typically restrict a borrower's ability to increase its leverage, enter new businesses, sell significant assets or merge with other companies without the approval of some proportion of the debtholders. Debtholders also frequently negotiate informational covenants pursuant to which borrowers agree to furnish detailed annual, quarterly and even monthly financial and other data to the debtholders. In addition, debtholders routinely sub-

ject borrowers to minimum financial ratios. These types of covenants are precisely the kinds of provisions that are necessary to discipline bank behavior.

The typical investment of a long-term debtholder is also much larger than the typical investment of a depositor and, accordingly, we should expect that the typical long-term creditor has a much greater incentive to monitor a bank. Moreover, these nondeposit creditors are almost uniformly institutional investors that possess the financial sophistication and business acumen necessary to monitor their borrowers. Finally, because the typical debt investment is long term, most debtholders cannot put their investment back to the bank in the same manner that depositors can withdraw their funds. Sudden, devastating bank runs will not be the market disciplinary mechanism employed by long-term debtholders.

IV. AN INSTRUMENT FOR MARKET DISCIPLINE: SUBORDINATED DEBT

In the previous Part, we determined that the market participant that can provide the most effective market discipline of banks is the non-depositor creditor that holds a long-term debt instrument issued by the bank. This Part seeks to determine the debt instrument that best enables such creditors to discipline banks. The task is to design a capital-enhancing debt instrument, the holders of which would have incentives most closely aligned with federal bank regulators. This Part sets forth proposed terms for the instrument and analyzes which banks ought to be required to issue such debt and how much and to whom.


93 Like equityholders, holders of a corporation's public debt generally have the right and ability to sell their debt in the secondary market and, thus, express their views as to the bank’s riskiness.

94 A well-established and reasonably liquid market for corporate subordinated debt securities exists, but few banks have issued debt securities to third parties. See Meyer, Conf. on Reform, supra note 4. As of June 30, 1999, subordinated notes and debentures represented only 1.3% of the total liabilities of U.S. insured depository institutions. See FDIC, Statistics on Banking Second Quarter 1999, Table RC-1, Assets and Liabilities of FDIC-Insured Commercial Banks (visited April 3, 2000) <http://www.fdic.gov/bank/statistical/statistics/9906/cbrc01.html>. 
A. Priority

The first question to address is the priority of the debt security in the capital structure of the bank. As noted in the previous Part, the goal is to find debtholders with incentives as similar as possible to those of the federal government, as bank regulator, and to the FDIC, the agency responsible for guaranteeing deposits and resolving failed banks. Because the FDIC guarantees depositors, the debt instrument should stand on an equal footing with the bank's insured depositors. The relevant security, however, should also provide a capital cushion to the bank that will absorb losses before the federal deposit insurance fund incurs a loss. Hence, the debt must, at a maximum, have a priority one stage below that of the bank's insured depositors. Balancing these two competing interests, it seems that the best place for the debt security in the capital structure of the bank is in a tier of debt immediately subordinated to the bank's depositors and general creditors (including trade and interbank creditors) and immediately prior to the remainder of the bank's debt. Holders of this debt would be paid in a bank's insolvency only after depositors' and general creditors' claims are fully satisfied, but before other creditors and equityholders receive money.

The implementation of this priority scheme may require a transition period. Some banks have debt outstanding, and requiring these banks to issue a senior subordinated debt instrument may compel them to violate certain covenants in their existing debt indentures or loan agreements. Those banks able to redeem the existing problematic debt without paying a substantial premium should be required to do so; other banks may be permitted to issue junior subordinated debt until such time as their existing problematic debt instruments mature.

B. Maturity

The maturity of the debt instrument should be determined by balancing two competing considerations. On the one hand, a debt security with a long maturity is preferable. From a capital adequacy perspective, only long-term debt contributes to a bank's capacity to incur losses over a period of time and remain solvent. The Federal Reserve Board's Capital Guidelines permit bank holding companies and state member banks to count debt in tier 2 capital if the debt has an original weighted average maturity of at least five years and is subordinated to general creditors and depositors. See 12 C.F.R. §§ 208 (1999) & 225 app. A, § 1.A.2.d (1998). The Capital Guidelines...
obligations do not provide much support to a bank in distress because short-term creditors can withdraw their funds from the bank precisely when the bank most needs them. Moreover, holders of long-term debt securities would have incentives more closely aligned with those of the government—ensuring the perpetual health of the bank—than would holders of short-term debt securities. Accordingly, long-term debt securities would provide more relevant pricing information to regulators than would short-term securities.

There is, however, a countervailing consideration. Requiring a firm repeatedly to issue short-term obligations has the potential benefit of forcing the bank to access the capital markets more frequently. As discussed above, a firm that knows it will have to raise capital frequently in the primary market will be more likely to behave appropriately—in a fashion that will make prospective investors consider the firm to be desirable.

In balancing these competing interests, we propose that Subject Banks (as defined below) should be required to issue subordinated debt securities with a minimum maturity of six years, and should be required to roll over a proportionate amount of their subordinated debt at least once every two years. Six-year debt should provide a

also require bank holding companies and banks to exclude from tier 2 capital 20% of the principal amount of the debt in each of the security’s last five years. See id. § 255 app. A, § IA.2.e. The requirements of the Capital Guidelines are set forth in infra note 109.

As noted above, one of the superior characteristics of debtholder monitoring versus depositor monitoring is that debtholders generally cannot make a run on the bank. See supra text accompanying notes 93–94.

The government, naturally, has an interest in preventing bank insolvency at all times. A holder of a very long-term debt instrument (say, a 100-year bond) has a similar interest because that creditor will only receive its principal investment back from the bank if the institution remains solvent for the next 100 years. In addition, the price of the bank’s 100-year debt security will reflect the market’s assessment of the bank’s risk of insolvency prior to maturity of the bond (that is, for the full 100 years). The price of a long-term bond will reflect its issuer’s insolvency risk over a longer term than would a short-term bond’s price.

Imposing a regulatory maximum maturity would not be beneficial. A bank theoretically could issue thirty-year debt securities, and thereby reduce its short-term exposure to the discipline of the capital markets by reducing the amount of debt it would have to roll over in the short-term. A bank issuing thirty-year debt would have to roll over one-fifteenth of its subordinated debt every two years, whereas a bank issuing ten-year debt would have to roll over one-fifth of its subordinated debt every two years. Moreover, by issuing fifteen tranches of thirty-year debt, rather than five tranches of ten-year debt, a bank would be permitted to count much more of its subordinated debt as tier 2 capital. See 12 C.F.R. §§ 208 (1999) & 225 app. A, §§ IA.2.d & IA.2.e (1998).

Despite these incentives, there are reasons to think that banks would not issue such very long-term debt. Banks would find longer-term debt securities to be a more expensive
sufficiently long-term investment to prevent runs on the bank's capital and to align investors' interests with those of the government and the long-term solvency of the bank.\footnote{100}

Although most of the currently outstanding subordinated debt issued by U.S. banking organizations has a ten-year maturity,\footnote{101} banks should be accorded as much flexibility as possible in determining the tenor of their subordinated debt. Some banks will find that they can issue six-year debt much more cheaply than ten-year debt; other banks will find that ten-year debt, or debt of even a longer term, is the most cost-effective approach for them. Under this proposal, banks would be able to issue ten-year debt, the current market standard, or debt of a shorter or longer term to meet their individual corporate finance needs. This flexibility also will permit banks to adapt their capital structures quickly to keep up with evolving market trends without having to wait for regulators to recognize the evolution and react with revised regulations.

Requiring banks to issue subordinated debt in staggered tranches, at least once every two years, will provide substantial capital markets discipline on bank behavior. A requirement to tap the capital markets at least once every two years should not be too burdensome—large bank holding companies typically issue subordinated debt into the capital markets once or twice per year.\footnote{102} Providing banks flexibility as to the frequency of their primary offerings would allow banks to avoid having to issue debt in times of market stress and to design a debt program that best suits their particular funding needs.

\begin{itemize}
\item form of financing. Investors require, \textit{ceteris paribus}, a higher return to lock up their money for a longer period. Investors also require, \textit{ceteris paribus}, a higher return on small, less liquid tranches of debt (which would be engendered by the longer-term debt approach). Even if some banks were to issue thirty-year debt, it is not clear that the longer-term loss absorption capacity of the debt and the longer-term incentive horizons of the holders of the debt would not outweigh the costs of less frequent tappings of the capital markets.
\end{itemize}

\footnote{100} A portion of this debt would count as tier 2 capital under the Capital Guidelines. Assuming a bank issues six-year debt and rolls over one-third of its outstanding debt every two years, immediately prior to rolling over a tranche, the bank would be permitted to count one-third of its outstanding subordinated debt as tier 2 capital; immediately after rolling over a tranche, the bank would be permitted to count two-thirds of its outstanding subordinated debt as tier 2 capital. \textit{See} 12 C.F.R. § 208 app. A, § II.A.2.e (1999). Assuming a bank issues ten-year debt and rolls over 10% every year, the corresponding percentages would be 70% immediately before rolling over a tranche and 80% immediately after rolling over a tranche. \textit{See id.}

\footnote{101} \textit{See} USING SUBORDINATED DEBT, \textit{supra} note 64, at 34-35.

\footnote{102} \textit{See id.} at 46.
One commentator has proposed that certain banks be required to issue puttable subordinated debt. Under that scheme, large banks would be required to have a minimum amount of subordinated debt outstanding at all times, and banks would have to stand ready to redeem at par value within ninety days any debt "put" to them by investors. If investor puts reduced a bank's outstanding subordinated debt below the prescribed minimum, the bank would have to issue additional subordinated debt, sell risky assets to reduce its minimum debt requirements or face closure by regulators.

This approach certainly would increase the amount of market discipline to which banks are subject, but requiring banks to issue redeemable debt is not a workable proposal for many reasons. Foremost among them is the threat of bank runs. Puttable subordinated debt too closely resembles a demand deposit and, while holders of bank subordinated debt will by and large be more sophisticated investors than depositors, the creation of a tier of uninsured quasi-demand obligations places a bank's capital base at risk of rapid erosion. Second, it seems unlikely that a bank experiencing significant puts of its subordinated debt would be able to replace potentially one-third to one-half of its capital base on ninety days' notice. Issuing securities, especially public securities to new investors, is typically a lengthy process. Third, the puttable debt would need to be in the form of floating-rate debt securities, and demandable floating-rate debt securities are a rare financial instrument. When introducing a relatively new type of security into the capital markets, such as bank subordinated debt, it would be best to keep the novel elements to a minimum. Fourth, a right to put a security back to the issuer at par encourages investors to exercise the put at the slightest sign of the

103 See Wall, supra note 6, at 9-11.
104 See id. at 4-6.
105 While investment professionals are less subject to irrational bandwagon behavior than individual investors, no institutional investor wants to be one of the only debtholders who failed to jump ship when all the other debtholders in a bank did jump. Moreover, the prisoner's dilemma faced by the creditors of a bank approaching insolvency suggests that even fully informed and rational creditors should exit at the first sign of trouble, even if the sign of trouble is chimerical. See supra text accompanying notes 21-25. A run on a large bank's puttable debt could have serious systemic repercussions. See Garten, Banking on the Market, supra note 80, at 162-63; see also supra Part I.B. (describing the systemic risks of bank failures).
106 See Wall, supra note 6, at 3. The puttable debt would have to be floating-rate because investors would put puttable fixed-rate debt back to the issuers as soon as general interest rates increased. See id.; see also BREALEY & MYERS, supra note 70, at 360 (describing the mechanics of floating rates).
issuer's eroding financial condition. Why sell into the market at 95% of par value, if the issuer stands ready to redeem at 100% of par value at any time? A ninety-day put waiting period will somewhat mitigate the tendency to put at the first sign of trouble, but not enough. The put mechanism will substantially eliminate the debt securities' ability to convey pricing information to bank managers, the market and regulators. Regulators, for example, will have little advance warning of a bank's financial difficulties; rather, at the first sign of weakness, all of the investors would rush to put their securities back to the bank.

C. Amount of Debt

We propose that each Subject Bank should be required to have outstanding at all times an amount of subordinated debt equal to two percent of the bank's risk-adjusted assets, as calculated under the Capital Guidelines applicable to such bank. The Capital Guidelines implicitly require banks to hold tier 2 capital against four percent of their risk-adjusted assets. The subordinated debt would count as tier 2 capital for a bank only to the extent currently permitted by the Capital Guidelines.

We expect that most Subject Banks will use the new subordinated debt to replace other outstanding securities counting as tier 2 capital. Because the Capital Guidelines require banks to reduce proportionally the amount of tier 2 capital credit received for subordinated debt securities with less than five years remaining until maturity, our proposal will require banks to operate with a slightly higher aggregate

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107 Wall suggests that the bank could avoid this eventuality by originally issuing their bonds at prices above par. See Wall, supra note 6, at 12. To the extent that banks are permitted to issue their bonds at prices above par, banks themselves obtain control over how much discipline the put mechanism will have.

108 Bank holding companies that have greater than $10 billion in assets and issue subordinated debt currently have subordinated debt outstanding equal to 2.9% of their risk-weighted assets. See USING SUBORDINATED DEBT, supra note 64, at 27.


110 Evanoff advocated amending the Capital Guidelines to replace the 8% total capital requirement with a 4% equity and 4% subordinated debt requirement. See Evanoff, supra note 6, at 355-56. We see no reason to alter the Capital Guidelines to effect our proposal. Moreover, adjusting the Capital Guidelines in such a fashion would be inconsistent with the requirements of the Basle Capital Accord, which is an internationally agreed upon framework for measuring the capital adequacy of banks. A U.S. departure from the Basle standards would have adverse international repercussions.
outstanding amount of capital securities. This implicit raising of the minimum capital requirements will increase a bank's cost of financing and may reduce its return on equity. Of course, if bank subordinated debt has the desirable effects laid out in this Article, regulators should consider at a later date reducing the levels of required tier 2 capital.

D. Issued at the Bank Level

Our proposal requires that banks, as opposed to their parent holding companies, issue the minimum amount of subordinated debt. This aspect of the proposal will help ensure that debtholders are concerned solely with the safety and soundness of the debt-issuing banks, rather than the well-being of banks' parent holding companies or affiliates, and that debtholders' interests will be closely allied with the interests of bank regulators.

Because the activities of banks would be the principal, if not exclusive, source of funds for bank debt servicing, debtholders would monitor the activities of banks and would discipline banks that seek to engage in high-risk activities. The activities of a bank's affiliates or its parent holding company would affect debtholders only to the extent

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111 As discussed above, immediately prior to rolling over a tranche of ten-year subordinated debt securities, a bank would only be permitted to count 70% of its subordinated debt as tier 2 capital. See § 208 app. A, § II.A.2.e (1999). Consequently, a Subject Bank would need to maintain additional permanent capital in an amount equal to 0.6% of its risk-weighted assets if such bank intended to maintain its reported capital ratios. See id.

112 Argentina, the only country that requires its banks to issue subordinated debt, requires banks to issue subordinated debt in an amount equal to 2% of their deposits. See USING SUBORDINATED DEBT, supra note 64, at 68. Although use of insured deposit denominators rather than risk-based asset denominators may advance more precisely the goal of minimizing losses to the insurance funds, the systemic risks posed by a banking organization are more likely proportional to its risk-based assets than its deposit liabilities.

113 As of year-end 1984, bank holding companies issued more than ten times the amount of debt issued by banks. See Robert B. Avery et al., Market Discipline in Regulating Bank Risk: New Evidence from the Capital Markets, 20 J. MONEY, CREDIT, & BANKING 597, 599 (1988). In contrast to our proposal, which focuses exclusively on bank-issued subordinated debt, the subordinated debt study required by the Gramm-Leach-Bliley Act mandates that the Federal Reserve and Treasury Department investigate the appropriateness of requiring both large banks and their holding companies to issue subordinated debt. See Gramm-Leach-Bliley Act, Pub. L. No. 106-102, § 108(a)(1), 113 Stat. 1338, 1361 (1999).

114 Most banks, and certainly all of the largest banks, are subsidiaries of holding companies. These holding companies may engage in a broad range of financial activities in which their subsidiary banks may not directly engage. See 12 U.S.C. § 1843 (Supp. II 1996). The Gramm-Leach-Bliley Act has expanded the types of activities that holding companies with "well-managed" and "well-capitalized" bank subsidiaries may engage. Such activities include insurance and securities underwriting and other activities deemed "financial in nature." See Gramm-Leach-Bliley Act §§ 101-161.
that those activities alter the bank's ability to service its subordinated debt. Any inter-corporate transactions that are beneficial to the bank should meet with debtholder approval. On the other hand, debtholders, like government regulators, would guard vigilantly against any attempts by a parent or an affiliate of a bank to divert resources from the bank or to engage in transactions that are detrimental to the bank.\footnote{115} This vigilance against inter-corporate transactions that are disadvantageous to banks—yet beneficial to non-bank affiliates within the same holding company—is especially vital in the post-financial modernization world, where banks may freely affiliate with a wide variety of other financial firms.

It is important that banks issue the required subordinated debt because, as detailed in the first Part of this Article, it is banks—and not their parent companies—that are special. After all, the goal of our proposal is to give banks a private-sector constituency that is interested in banks—not the corporate owners of banks—and that helps federal regulators safeguard banks.\footnote{116}

Requiring the corporate owners of banks to issue subordinated debt would not serve the goals of risk monitoring and disciplining at the bank level. Indeed, the holders of parent-company debt may be significantly insulated from risk taking at the subsidiary bank level by the other varied businesses in which the parent company may engage. This will be especially true in the wake of the Gramm-Leach-Bliley Act, which authorizes the creation of broadly diversified financial enterprises. The banking operations of the new financial holding companies may represent only a small part of the overall operations of the enterprise, and subordinated debtholders of such a financial holding company may have no need to be vigilant as to the activities of the

\footnote{115} Inter-corporate transactions are a principal concern of bank regulators. Congress and federal regulators have long feared that, especially in times of severe financial stress, bank holding companies will be tempted to divert resources from banks to their nonbanking affiliates. See, e.g., Garten, Market Discipline Revisited, supra note 43, at 204-05; Satish M. Kini, New Fed. Letter Eases Limits on Use of Affiliate Securities as Loans, BANKING POL'Y REP., May 17, 1999, at 12. Sections 23A and 23B of the Federal Reserve Act seek to safeguard against such conduct by imposing restrictions on transactions involving banks and their affiliates. See 12 U.S.C. §§ 371c & 371c-1 (1994).

\footnote{116} Indeed, federal regulators' principal interest in the parent holding companies of banks stems from how the activities of the parents may endanger their subsidiary banks. Cf. Heller & Fein, supra note 49, § 17.01 (noting that, historically, regulation of bank holding companies was aimed at reducing concentration in the banking industry).
firm's subsidiary banks so long as the other parts of the business are managed prudently.\textsuperscript{117}

Admittedly, requiring banks that are subsidiaries of parent holding companies to issue subordinated debt may create accounting and disclosure issues for parent firms. For example, parent holding companies may need to issue detailed public financial reports and break-out operating results at the subsidiary bank level, practices with which they may not be familiar and which may involve added expense. Moreover, financial analysts and other market participants may, for the first time, raise questions regarding a subsidiary bank's performance, rather than just the overall financial holding company's results.

Subsidiary banks also may need to be managed differently than under current practice, with greater attention given to the legal entity of the bank and how transactions affect the bank's subordinated debtholders. Currently, most holding companies are operated as integrated organizations that make use of centralized risk-management systems.\textsuperscript{118} That management system may need to be changed because subordinated debtholders will place greater emphasis on the performance and risks undertaken at the bank level. That change may involve greater inefficiencies than a system that permits business-line management across the entire financial holding company, but that change also may result in better firewalls between the bank and its affiliates, in better corporate policies to safeguard against intercompany transactions that adversely affect the bank, and in less risk that a court might pierce the corporate veil and hold the bank liable for an affiliate's debts or misconduct.

Although requiring banking organizations to issue debt at the bank level may create the inefficiencies described in the preceding paragraphs, those inefficiencies may be offset by the reduced costs of bank-level issuance. Empirical evidence has shown that the market requires a higher return on bank holding company subordinated debt than bank subordinated debt.\textsuperscript{119} Accordingly, banking organiza-

\textsuperscript{117} For example, one of the first true financial holding companies under the Gramm-Leach-Bliley Act is Citigroup. Citigroup engages in securities activities through Salomon Smith Barney and a broad array of insurance activities through the former Travelers Group of insurance companies. The bank assets of the firm represent approximately one-third of the total assets of Citigroup. See Using Subordinated Debt, supra note 64, at 31.

\textsuperscript{118} See Mattingly & Fallon, supra note 58, at 41.

\textsuperscript{119} See Julapa Jagtiani, George Kaufman & Catharine Lenieux, Do Markets Discipline Banks and Bank Holding Companies? Evidence from Debt Pricing, Emerging Issues Series, Fed. Res. Bank of Chicago, June 1999, at 15. Because some empirical evidence also has shown that the debt capital markets are equally able to perceive the riskiness of banks and
tions should be able to issue subordinated debt at the bank level more cheaply than at the holding company level.

Finally, issuance of subordinated debt at the bank level will help avoid corporate control issues that may arise if the debt were required to be issued at the parent company level. Because, under this proposal, the subordinated debt will be typically issued by a bank that is a wholly owned subsidiary of a parent holding company, there is little risk that the subordinated debt will be accumulated by a potential corporate suitor as a means for acquiring the parent holding company. By contrast, there would be a greater risk that acquirers of debt that is issued at the parent company level would seek to combine that debt holding with other direct or indirect stake holdings in the parent company in an attempt to exercise control or controlling influence over that company.120

E. Subject Banks

Our proposal divides banks into three tiers and imposes different requirements on banks in each tier. The smallest banks ("Tier III banks")—those with total consolidated assets less than $1 billion—would not be compelled to issue subordinated debt but would be allowed to opt-in to the system. Intermediate-size banks ("Tier II banks")—those with total consolidated assets between $1 billion and $10 billion—would be required to issue subordinated debt but would be permitted to do so in a variety of manners. The largest banks ("Tier I banks")—those with total consolidated assets in excess of $10 billion—would have to issue subordinated debt in the form of securities registered with the Securities and Exchange Commission ("SEC").121

We believe that thresholds based on asset size alone would be the most practical. Our subordinated debt program is designed to mini-

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120 In determining whether one company has control over another for purposes of the Bank Holding Company Act, the Federal Reserve has long considered not only the size of the acquirer’s equity stake but also the amount of subordinated debt held by that stakeholder. See, e.g., Wells Fargo & Co., Order Approving Notice to Engage in Certain Lending Activities, 82 Fed. Res. Bull. 165, 165 n.2 (1996).

121 Federal regulators should be authorized to develop an indexing mechanism to adjust over time the asset thresholds for each tier. See, e.g., Gramm-Leach-Bliley Act, Pub. L. No. 106–102, § 121(a), 113 Stat. 1338, 1373–81 (1999) (requiring the Federal Reserve Board and the Treasury Department to establish jointly an indexing mechanism for adjusting the $50 billion asset limit for financial subsidiaries of national banks).
mize losses to the deposit insurance funds and to assist regulators in managing systemic risk in the financial infrastructure of the United States. Although certain non-size criteria, such as the geographic scope of an institution or the nature and complexity of an institution's activities, are relevant to systemic risk assessment, we believe that it is more important to provide banking organizations with clarity as to the scope of application of the subordinated debt rules than to pick up a handful of small organizations that pose an outsized risk to the financial system.\footnote{Requiring such small banks to issue debt securities would impose on them unacceptably high financing costs.} Holding companies with multiple bank subsidiaries would be required to aggregate the assets of all their banking affiliates to determine which tier their banks fall under. Additionally, the subsidiary banks of a holding company would be required to issue, in the aggregate, an amount of subordinated debt as if they were a single bank in that tier. If a holding company determines that direct issuance of subordinated debt by multiple banks would be inefficient, the holding company could merge its banks or the banks could collectively issue a single pool of subordinated debt securities under the rules applicable to that tier.\footnote{The aggregation requirement would ensure that two holding companies that control the same amount of banking assets do not receive disparate treatment under our proposed rule. The requirement also would ensure that holding companies do not maintain separate banks merely to escape the subordinated debt requirement.} The aggregation requirement would ensure that two holding companies that control the same amount of banking assets do not receive disparate treatment under our proposed rule. The requirement also would ensure that holding companies do not maintain separate banks merely to escape the subordinated debt requirement.

1. Tier III Banks

The proposal envisions excluding Tier III banks from the mandatory elements of the subordinated debt plan.\footnote{The legal, administrative, and economic consequences of imposing this requirement on Tier III banks need further study and analysis.}
tive, disclosure and other fixed costs of issuing subordinated debt would be excessive for the small banks in Tier III. In addition, if small banks were made subject to this requirement, they would be required to issue relatively small amounts of debt. The amount of the debt issued may not be sufficient to draw adequate investor interest, and small banks might have to pay a substantial interest-rate premium to attract debtholders. Investors also might demand a rate premium from Tier III banks to compensate for the fixed costs of monitoring, which would be relatively high compared to the small amount of debt issued by such banks.

The exclusion of Tier III institutions is not problematic for our proposal. Tier III banks, by and large, tend to engage in traditional banking activities with which regulators have the greatest familiarity and expertise. As a result, the marginal benefit of the additional monitoring and discipline provided by private-sector creditors would be negligible in the case of small, traditional banks. Moreover, and perhaps more importantly, the failure of a Tier III bank would not pose the same systemic risk to the economy or to the federal deposit insurance fund as would the failure of a larger institution. Finally, the proposal would permit Tier III banks to opt-in to the subordinated debt scheme at their own discretion.

2. Tier II Banks

Banks with sufficient assets to place them in Tier II would be required to issue subordinated debt. Tier II institutions are large enough to be able to absorb the costs of periodic debt issuance and to

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126 For example, a bank with $1 billion in total consolidated assets—the largest Tier III bank—would be required to issue only approximately $20 million in subordinated debt.

127 In advancing a proposal for puttable subordinated debt, economist Larry Wall also exempted small banks for many of the same reasons outlined above. See Wall, supra note 6, at 4. Mr. Wall, however, noted that the expense to debtholders of monitoring small banks could be reduced through the use of professional monitors. For example, he suggested that private insurers could issue insurance contracts covering the debt and serve as delegated monitors for investors. See id. at 5. It seems that such professional monitors would face the same problem, however, in that they would receive a small fee for protecting the interests of small debtholders.

128 Small banks may voluntarily choose to opt-in to the subordinated debt scheme if, as we propose below, they are subject to reduced government supervision and regulation and have lower examination expenses upon issuing the required amount of debt or if their corporate parents are permitted to engage in expanded activities once the bank has issued the necessary debt. See infra Parts V.A. and V.E.
issue debt without having to incur a sizable interest-rate premium. Furthermore, the amount of debt issued by a Tier II bank would be of sufficient quantity to attract investor interest. Tier II banks also are far more likely than Tier III institutions to engage in non-traditional financial activities, such that these institutions and their federal regulators may benefit from the discipline of debtholders. Perhaps most importantly, Tier II banks are of sufficient size that their failure may have adverse systemic consequences.\textsuperscript{129}

Under our proposal, Tier II banks would be permitted to issue unregistered debt securities through private placements.\textsuperscript{130} Although Tier II banks are large enough to be required to issue subordinated debt, the size of a Tier II bank's debt offering may not be sufficient to require that the debt be issued in a registered public offering.\textsuperscript{131} Moreover, a Tier II bank may not issue enough debt securities to facilitate the creation of a public market in the security.

Because of the lack of a public market for the Tier II banks' subordinated debt securities, the debt securities of Tier II banks likely would be held principally by small numbers of sophisticated institutional investors, such as pension and mutual funds and insurance companies. These investors would possess the financial and business acumen necessary to evaluate the risk posture of the banks. The debtholders also would have sufficient resources invested so that they will have incentives to discipline bank managers and limit their risk-taking activities. The investors may demand risk premiums to protect themselves from excessive risk taking on the part of a particular institution, or the debtholders may negotiate \textit{ex ante} restrictive covenants that impose limits on bank activities. The existence of such premiums or covenants should serve as important signals to federal regulators both as to the private sector's evaluation of a particular bank's risk position and a particular bank's willingness to limit its activities in response to investor concerns.

\textsuperscript{129} As of June 30, 1999, approximately 440 banks, with total consolidated assets of approximately $1.2 trillion, fell within our Tier II category. The assets of these banks represent about 18\% of total U.S. banking assets. See \textit{FDIC Statistics, supra} note 125.

\textsuperscript{130} For a complete description of the requirements of a valid private placement under the Securities Act of 1933, see, e.g., LARRY D. SODERQUIST, UNDERSTANDING THE SECURITIES LAWS \S\ 6.2, (3d ed. 1996).

\textsuperscript{131} Companies generally find it difficult to raise less than a few hundred million dollars in a public debt issuance. See, e.g., Laura Mandaro, \textit{Credit Suisse, B of A Eye Placing Tech Debt Privately, AM. BANKER}, Nov. 10, 1999, at 5.
3. Tier I Banks

Tier I banks are the largest banks in the country. These institutions and their parent holding companies are typically at the forefront of financial modernization and change. Banks in Tier I engage in a broad array of financial activities beyond the traditional banking functions of taking deposits and making loans. As a result, these institutions and their federal regulators would benefit most from private-sector discipline. In addition, by virtue of being the nation’s largest banks, their failure poses the greatest risk to the financial system.

Under our proposal, Tier I institutions would be called upon to issue subordinated debt to the public in offerings registered with the SEC. These Tier I banks and their bank holding companies already issue a substantial amount of subordinated debt; consequently, transition costs for these banks should be low.

4. Transition Rules

A bank’s asset size is subject to a fair amount of volatility. In order to avoid logistical inefficiencies for a bank with an asset size that meanders around $1 billion or $10 billion, a bank with assets that cross the Tier I or Tier II thresholds from below should be permitted to defer compliance with the subordinated debt requirements of the new tier for a period of two years. Only banks with assets that exceeded $1 billion for eight straight quarters would be automatically subject to the privately issued subordinated debt program; and only banks with assets that exceeded $10 billion for eight consecutive quar-

132 As of June 30, 1999, ninety-four banks, with total consolidated assets of approximately $4.1 trillion, fell within our Tier I category. The assets held by Tier I banks represent approximately 63% of all the assets held by banks in the United States. See FDIC Statistics, supra note 125.

133 This aspect of the proposal mirrors, to some extent, the subordinated debt proposal advanced by Douglas Evanoff. See Evanoff, supra note 6, at 357.

The Gramm-Leach-Bliley Act allows national banks to engage in various non-banking financial activities through subsidiaries. Under the Act, national banks may control such subsidiaries only if they meet certain conditions. Among the conditions is a requirement that if the national bank is one of the fifty largest banks in the United States, it must issue long-term, unsecured debt rated in the top three investment grades; if the national bank is between the 51st and 100th largest banks in the United States, it must either have debt in the top three investment grades or meet other criteria imposed by the Federal Reserve and Treasury Department. See Gramm-Leach-Bliley Act, Pub. L. No. 106-102, § 121, 113 Stat. 1338, 1341-84 (1999).

134 The top fifty U.S. insured commercial banks already finance over 2% of their risk-weighted assets with subordinated debt. See USING SUBORDINATED DEBT, supra note 64, at 27. Most of this subordinated debt is held by the banks’ holding companies. See id. at 30.
ters would be automatically subject to the publicly issued subordinated debt program. This transition rule would save banks from the regulatory burden of moving in and out of the subordinated debt program and would provide growing banks with a substantial period of time to prepare for compliance with the program. Similarly, we propose that a bank should only be allowed to escape the subordinated debt requirements for a particular tier if its assets remain below the tier’s minimum thresholds for eight consecutive quarters.155

F. Foreign Banks

The question arises as to how foreign banks with U.S. branches and agencies should be treated and whether these institutions also should be required to issue subordinated debt in order to engage in banking and non-banking businesses in this country. On the one hand, to the extent that the subordinated debt requirement is viewed as an additional burden on U.S. banks, foreign banks that operate in the United States may gain a competitive advantage over their U.S. competitors if these foreign institutions do not need to comply with the requirements of this proposal.

At the same time, however, imposing the subordinated debt program on foreign banks raises several difficulties. To begin with, requiring foreign banks operating in the United States to issue subordinated debt would result in a U.S. capital requirement being imposed extraterritorially on foreign-based institutions and would be contrary to the internationally accepted policy of consolidated “home country” supervision, in which a bank’s home country takes the lead in setting the capital and other standards that should apply to that institution. The United States’ imposition of a subordinated debt requirement on foreign banks could effectively supersede capital benchmarks established by the home country supervisors of those foreign banks and would effectively require those foreign banks to manage their international operations to conform to the U.S. subordinated debt requirements. Were each host country to follow the United States’ precedent and to adopt similar unique capital requirements, internationally active banks could be subject to an array of conflicting and possibly irreconcilable standards. In addition, imposing the subordinated debt requirements on foreign banks may be impractical given differences

155 For another federal financial institution transition rule, see generally 17 C.F.R. § 275.203A-1 (1999) (establishing transition rules for investment advisers who cross the $25 million asset threshold and thus become subject to SEC registration requirements).
in bank accounting practices, balance sheet structures and bank and capital market regulation in different countries. Perhaps most importantly, few foreign banks with U.S. branches and agencies hold deposits that are insured by the U.S. government. For this reason, the failure of a foreign bank does not expose a U.S. federal taxpayer to the same potential liability as the failure of a U.S. bank, and the government does not have the same interest in constraining a foreign bank’s risk as the government has in keeping a domestic institution’s risk profile in check.

In any event, the imposition of a subordinated debt requirement on U.S. banks, and not on foreign banks operating in the United States, should not give rise to significant competitive inequities. As discussed in greater detail in the next Part, U.S. banks that issue subordinated debt under our proposal will benefit from fewer examinations and less general regulatory oversight. Foreign banks, by contrast, would not be eligible to take advantage of these benefits. In addition, to the extent that a subordinated debt program is successful in the

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136 United States regulators have long recognized these differences and have not required foreign banks active in the United States to comply with all of the capital requirements that apply to domestic banking institutions. For example, nearly a decade ago, the Federal Reserve and the Treasury Department expressly rejected applying to foreign banks active in the United States a “leverage ratio” (a ratio of tier 1 capital to total assets), such as the one that applies to U.S. banks and bank holding companies. See Board of Governors of Fed. Res. Syst. and Secretary of Dept. of Treas., Capital Equivalency Report 41 (June 19, 1992) (noting that different standards are necessary to “accommodate[] the significant differences in asset structures of banks from different countries and take[] into account off-balance sheet activities”).

More recently, the Federal Reserve has departed from this precedent and has proposed a leverage requirement for foreign banks that have U.S. branches or agencies that wish to engage in expanded financial activities in the United States under the Gramm-Leach-Bliley Act. Nevertheless, that leverage requirement would still be more lenient than the requirement that applies to U.S. banking firms. See Bank Holding Companies and Change in Bank Control, 65 Fed. Reg. 3785, 3785 (2000) (to be codified at 12 C.F.R. § 225). European Commission officials have raised the possibility of taking action against the United States in the World Trade Organization to protest the Federal Reserve’s imposition of U.S. capital standards abroad. See Rob Garver, Foreign Banks Say U.S. Reforms Leave Them at a Disadvantage, AM. BANKER, Mar. 16, 2000, at 1.

137 As of June 1999, only twenty-two U.S. branches of foreign banks held FDIC-insured deposits, totaling approximately $3 billion. That sum represents less than 1% of the $3.7 trillion of total federally insured deposits. See FDIC, Deposits of all FDIC-Insured Institutions (visited April 3, 2000) <http://www2.fdic.gov/sod/newtable1frame_main.cfm> (using June 30, 1999 in date field). In addition, foreign bank branches in the United States are limited in their ability to accept retail deposits. See 12 U.S.C. § 3104 (1994).

138 See supra text accompanying notes 37-38 on why we regulate banks. Of course, foreign bank failures could pose systemic risks to the United States, but these systemic risks are nearly identical to the risks posed by non-bank financial intermediaries, which also are not subject to a subordinated debt requirement.
United States, it may also be implemented internationally as part of the Basle Capital Accord, in which case all banks—both U.S. and foreign—will be subject to similar subordinated debt requirements.  

G. Insiders

Our proposal mandates that the subordinated debt be issued to investors that are different from and independent of the managers and equityholders of the bank, its affiliates or its parent holding company. In addition, our proposal requires that debtholders not have significant business relationships with the debt-issuing bank or its affiliates. Subordinated debt held by such insiders of a bank or its affiliates would not be counted towards the amount of subordinated debt required to be issued by the bank.

This aspect of the proposal seeks to ensure that subordinated debtholders do not have relationships with the bank that would compromise their willingness and ability to monitor and, where necessary, impose limits on the activities of debt-issuing banks. Our concern is that if, for example, an insurance company not only held the bank’s subordinated debt but also sold a significant volume of its insurance policies to the bank’s customers and obtained credit through the bank, that insurance company may have priorities and goals that conflict with its role as private-sector monitor of the bank’s activities. The insurer may be willing to purchase and hold the bank’s subordinated debt not because the bank’s subordinated debt securities are an attractive investment for the insurer but because ownership of the securities may be a means to protect the insurer’s business relationships with the bank.

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139 To this end, one of the “three pillars” of the new capital framework proposed by the Basle Committee on Banking Supervision is market discipline. See Basle Committee on Banking Supervision, A New Capital Adequacy Framework: Pillar 3 Market Discipline (visited April 3, 2000) <http://www.bis.org/publ/bcbs65.htm> (consultative paper). The other two pillars are minimum capital requirements and supervisory review processes. See id.

140 Larry Wall recognized similar concerns and proposed, as well, that bank insiders be permitted to purchase only limited quantities of the bank’s subordinated debt. See Wall, supra note 6, at 8.

By insiders we mean to include any shareholder of the bank or affiliate that owns or controls more than 5% of any class of voting securities of the bank or affiliate. Such a 5% threshold corresponds with the threshold contained in the reporting requirement of sections 13(d) and 15(g) of the Securities Exchange Act of 1934, 15 U.S.C. §§ 78m(d) & 78u(g), and therefore should be relatively easy for publicly owned bank holding companies and regulators to monitor.

141 Regulations would be required to determine what constitutes a business relationship of sufficient significance to require the exclusion of the debtholder.
This restriction will necessitate regulatory monitoring in order to be successful. Bank examiners may need to review bank subordinated debt periodically to ensure that outstanding debt is actually held by independent investors. Regulators also may need to craft special rules or give heightened supervisory scrutiny to banks that have issued the required amount of subordinated debt to third parties but have also issued a substantial amount of such debt to insiders and affiliates. Negotiation of the terms of the debt and decisions about enforcement of these terms may be affected by the presence of bank insiders and affiliates in the class of investors. The quality of pricing information conveyed by the secondary market for the debt may also be weakened if a substantial proportion of the debtholders are related to the bank in ways other than as debt investors.

H. Federal Administration

A single federal financial regulatory agency could be entrusted to administer and ensure uniform compliance with the subordinated debt program. A natural choice for this duty would be the FDIC, which is the only federal banking agency that has a role in supervising all banks, whether state or federally chartered. The FDIC's principal mission is to maintain public confidence in the banking system, and the agency is specifically entrusted with preserving the safety and soundness of the federal deposit insurance fund—the very goal of our proposal. For these reasons, the FDIC has a direct stake in keeping bank risk under control, and the FDIC's interests and those of subordinated debtholders are closely matched.

If the FDIC were chosen as the administrator of the subordinated debt program, banks required to—or, in the case of Tier III institutions, that choose to—issue subordinated debt would be required to report annually to the FDIC and to certify that they have issued the

142 The FDIC is the primary federal supervisor of state banks that are not members of the Federal Reserve System and, because of its role in running the federal deposit insurance program, it is the backup supervisor over all federally insured depository institutions. See, e.g., Christian A. Johnson, Wild Card Statutes, Parity, and National Banks—The Renascence of State Banking Powers, 26 LOYOLA UNIV. CHICAGO L. REV. 351, 360 (1995).

143 By contrast, the OCC is charged with supervising national banks, and it often sees its mission as promoting the national bank charter over state bank charters. See, e.g., Johnson, supra note 142, at 363-65; see also Rob Garver, Visit from Hawke Kept 'National' in Bank's Name, AM. BANKER, Feb. 11, 2000, at 1 (detailing the efforts of the Comptroller of the Currency to keep a national bank from switching to a state charter). The Federal Reserve is principally responsible for supervising at the holding company level and its role often puts its interests at odds with those of the OCC. See infra note 164 and accompanying text.
required amount of debt to non-insiders. Banks also would be required to reveal the pertinent terms of their subordinated debt contracts. The FDIC's principal obligations would be to review these submissions to ensure compliance with the requirements of the program and to watch for signals from the market as to the risk posture of the issuing banks. In the ordinary course, the FDIC's role should not result in an added level of day-to-day oversight of banks or give rise to significant added compliance burdens to subordinated debt issuers. The FDIC, however, would have the residual authority—such as the authority it currently possesses by virtue of its administration of the federal deposit insurance fund—to inquire of and to conduct on-site examinations for compliance in situations in which bank submissions prove insufficient, unclear or otherwise inadequate. The FDIC also would have the power to sanction or levy fines against banks that fail to meet their subordinated debt obligations. In addition, the FDIC would be empowered to conduct examinations if market signals or subordinated debt contract terms indicate that the issuing bank was engaged in risky activities.

Entrusting all of the administrative and monitoring duties of the subordinated debt program to the FDIC, however, could be problematic. For example, the primary federal regulator of each issuing bank currently has responsibility for the capital adequacy of that bank, and it would be natural for that regulator to play a leading role in determining whether the bank's subordinated debt issuance was adequate. In addition, a bank's primary federal regulator is the agency most familiar with the issuing bank and would be in the best position to understand the various market signals provided by subordinated debtholders regarding the risk profile of that bank.

1. Other Considerations

Forcing financial institutions to alter their capital structure will have secondary effects. For example, requiring certain banks to issue debt (in replacement of equity or as a supplement to existing equity) may reduce the value of their enterprises and will certainly raise the

144 See infra Part V.A. regarding how this system should actually reduce regulatory burden.

145 The FDIC possesses similar authority to take actions against banks and their managers when they are engaged in unsafe and unsound banking practices that place the federal deposit insurance funds at risk. See, e.g., 12 U.S.C. § 1818(b) (1994).
financing costs of those banks. In addition, compelling a bank to issue debt and to increase its leverage may increase the bank's expected costs of financial distress by an amount greater than the expected benefits of the debt. Banks are by their nature highly leveraged companies—deposits are a form of leverage—and forcing them to obtain still more leverage may have high costs. These costs may outweigh the advantages conferred by increased discipline. We cannot say outright, however, that our proposal would impose inefficiencies in capital financing decisions simply because banks are not currently issuing the debt that the proposal would require. The Capital Guidelines already distort bank capital structures in an anti-debt direction; it is possible that our rule would restore banks' capital structures to optimal levels.

At least one commentator has indicated a preference for standardized terms if banks are to be required to issue subordinated debt. Regulators could require all banks to issue subordinated debt of the same maturity, with the same frequency, and pursuant to debt contracts that contain the same set of covenants and conditions. We believe, however, that banks should be granted the maximum amount of flexibility possible in designing and issuing their subordinated debt consistent with achieving the regulatory goals of increasing market discipline and market signaling to regulators. The most obvious benefit of standardization is that it would provide regulators with signals that are more comparable across different banking organizations. This benefit is outweighed by numerous costs, many of which have been mentioned above. Investors in bank subordinated debt will value highly an ability to tailor covenants to the particular bank, and regulators will be able to obtain a great deal of relevant information about a bank's risks by evaluating these covenants. Furthermore, banks will value an ability to negotiate covenants in, and determine maturities of, their debt instruments.

Some commentators have proposed establishing a maximum interest rate on a bank's subordinated debt securities. Imposing such a cap on bank subordinated debt would be counterproductive. Determining the appropriate cap would be an insurmountable task; the cap would need to be raised or lowered continually to reflect the existing

146 The value of a leveraged firm is generally equal to the sum of three elements: (i) the value of the firm if financed completely with equity; (ii) the present value of the tax benefit of the firm's debt; and (iii) the present value of the costs of financial distress posed by the firm's debt. See Brealey & Myers, supra note 70, at 485.

147 See Meyer, Conf. on Reform, supra note 4.
interest rate environment; and a uniform cap would treat different banking organizations with different capital structures unevenly. Similarly, banks should be free to issue fixed or floating-rate securities. Most U.S. banks and bank holding companies that currently issue subordinated debt issue fixed-rate securities. The capital markets, however, are sophisticated enough to price floating-rate debt as accurately as fixed-rate debt, and banks' flotation of both fixed- and floating-rate debt should not hinder greatly regulators from making peer group comparisons.

The one requirement that we would place on a bank's subordinated debt is that it not be puttable at the option of the holder, for all the reasons set forth above. Banks should be free, on the other hand, to make the debt callable at the option of the bank at any time. Although, to be consistent with the Capital Guidelines, the bank should be required to consult with its appropriate federal banking agency prior to redeeming any such debt.

V. COLLATERAL BENEFITS

Requiring banks to issue subordinated debt securities would improve the stability and soundness of the banking system by complementing federal regulators' efforts to place limits on banks' risk-taking activities. As this Article has detailed, subordinated debt-based market discipline would be an important complement to the existing scheme of bank regulation and supervision. Our proposal also would have other important collateral benefits. In addition to contributing meaningfully to risk monitoring, our proposal should lead to reduced frequency and cost of bank examination while simultaneously enhancing examination efficiency; increased disclosure of bank activities; an efficient set of restrictions regarding the proper scope of bank product diversification; and other collateral benefits.

A. Examination Frequency, Efficiency and Cost

A significant benefit of this proposal is that it would permit less frequent examinations of banks by federal regulators, while facilitat-

148 See USING SUBORDINATED DEBT, supra note 64, at 35.
149 Participants in the existing market for bank and bank holding company subordinated debt have indicated that the lack of standardization across such debt instruments does not make it difficult to compare the credit quality of various issuers within a peer group. See id. at 45.
ing better assessments of the risk posture of institutions.\textsuperscript{151} By relying on signals from subordinated debtholders, regulators would be able to monitor the well-being of an institution without engaging in a direct examination.\textsuperscript{152} For example, regulators would have an indication of private-sector concerns about an institution if holders of subordinated debt began demanding a premium from a Tier I bank that was seeking to roll over its maturing debt securities or if a variance emerged between the secondary market price of subordinated debt securities issued by an institution and its peer group. Similarly, the imposition by subordinated debtholders of certain contractual covenants on a bank might indicate a particular set of risks that ought to concern regulators. The unwillingness of bank management to enter into certain covenants agreed to by other banking peers also may be an important indicator of a bank's risk policies. By use of such market signals, regulators would not need to conduct full-scale on-site examinations with their current degree of frequency; rather, examinations could be more precisely and effectively targeted. Regulatory scrutiny could be directed at the particular institutions that the private sector signaled as raising concerns. When covenants indicate that particular activities are of greatest concern, regulators may direct attention to those bank activities.\textsuperscript{153}

Reducing the frequency of bank examinations would reduce the monitoring and administrative costs of federal regulators, ease the regulatory burden on banks, and result in lower examination fees.\textsuperscript{154} These lower examination burdens and fees may be sufficient to entice Tier III banks—which, as noted in Part IV above, would not be required to issue subordinated debt securities—to opt-in to the subordinated debt program. These small banks may find that the cost of

\textsuperscript{151} In general, national and state banks must be examined every twelve months. See, e.g., 12 U.S.C. § 1820(d)(1) (1994). For example, in some cases banks may be examined on an eighteen-month cycle. See id. § 1820(d)(4).

\textsuperscript{152} Each federal bank regulatory agency is authorized to conduct a “thorough examination of the affairs” of a bank. See 12 U.S.C. § 481 (1994). The size and scope of the examination depends on a variety of factors, including the regulatory agency conducting the examination and the size, activities and reputation of the bank to be examined. Examinations focus on the capital adequacy, asset quality, management ability, earnings and liquidity of a bank. See Alfred Dennis Mathewson, \textit{From Confidential Supervision to Market Discipline: The Role of Disclosure in the Regulation of Commercial Banks}, 11 J. CORP. L. 139, 143 (1986).

\textsuperscript{153} This is not to imply that regulators would abandon traditional bank examinations. On occasion, but with less frequency than is currently the case, regulators would conduct a full-scope examination of an institution.

\textsuperscript{154} The cost of regular federal bank examinations is assessed against the examined bank. See 12 U.S.C. § 1820(e)(1) (1994).
issuing subordinated debt is less than the cost of the current stricter examination procedures.

B. Risk Premiums

This proposal also would enable the FDIC to establish more quantitatively precise risk premiums for federal deposit insurance. Since the passage of the Federal Deposit Insurance Corporation Improvement Act ("FDICIA") in 1991, the FDIC has been required to operate a risk-based assessment system for insured depository institutions.155 The FDIC's current system determines a bank's insurance premium based on the bank's reported capital ratios and a subjective assessment of the bank's financial soundness.156 The FDIC could use the pricing mechanism created by bank subordinated debt to assist it in its efforts to price banks' deposit insurance premiums. Rather than rely on publicly reported capital ratios (which are increasingly subject to regulatory capital arbitrage) and supervisory assessments of financial soundness (which are highly subjective), insurance premiums could be calculated based in part on debt ratings or the market prices of the subordinated debt issued by banks under this proposal. Increasing the objectivity of the data used by the FDIC to determine insurance assessments will enable the FDIC to be both aggressive and fair in imposing insurance fees on banks.

In addition, this proposal would provide federal bank regulators with credible market signals of the deteriorating financial condition of a bank. As a bank deteriorates, the price of the bank's subordinated debt securities will fall, and the implicit yield on the bank's debt will rise. Bank regulators will easily be able to monitor these prices and could impose restrictions on banks with falling debt prices similar to those dictated by the prompt corrective action rules—restrictions on payment of dividends, acquisition of assets and engagement in new lines of business.157 Because different banks have different capital structures and will have subordinated debt securities with different terms, regulators monitoring bank debt prices will not be able to use uniform thresholds, like those used in prompt corrective action, to

155 See 12 U.S.C. § 1817(b)(1)(A) (1994). FDICIA defines a risk-based assessment system as one in which the depository institution's insurance assessments are calculated on the basis of (i) the probability that the deposit insurance fund will incur a loss with respect to the institution; (ii) the likely amount of the loss if it occurs; and (iii) the revenue needs of the deposit insurance funds. See id. § 1817(b)(1)(C).
trigger sets of restrictions. Rather, regulators will be able to make rough interbank comparisons (between banks) and fairly precise intrabank, intertemporal comparisons (a single bank over time).

C. Transparency

Another significant collateral benefit of our proposed system of subordinated debt would be to increase the amount and quality of financial information provided by banks and bank holding companies. At the present time, banks, especially banks that are wholly owned subsidiaries of parent holding companies, lack incentives to disclose financial information to the public. Under a system of market discipline, however, banks will have strong incentives to report timely, relevant financial information or face the prospect of being punished by a market that does not adequately comprehend the institution's risk profile. Increased public disclosure about bank operations will improve the ability of market participants to distinguish strong banks from weak banks\textsuperscript{158} and also will provide regulators with another important source of information for their own assessment of bank operations and risks.\textsuperscript{159} In addition, market participants likely will be most interested in the types of transactions that expose banks to the greatest risks, including bank derivative activities.\textsuperscript{160} These also are the precise transactions in which regulators have the greatest interest.

D. Regulatory Arbitrage

A further benefit of our proposal may be to decrease opportunities for banks to engage in regulatory arbitrage and to prevent competition among various bank regulatory agencies from becoming a "race to the bottom." The U.S. bank regulatory system does not vest supervisory authority over banks and banking organizations with a single regulator; rather, supervisory authority over banking firms is divided among several competing regulatory agencies. Banks may choose to be state or federally chartered. State-chartered institutions


\textsuperscript{159} See Ferguson, supra note 158. To this end, it is worth noting that the Gramm-Leach-Bliley Act requires Federal Reserve examiners to make increased use of publicly available information. See Gramm-Leach-Bliley Act, Pub. L. No. 106-103, § 111, 113 Stat. 1338, 1362-66 (1999).

\textsuperscript{160} See Calamiris & Litan, supra note 84, at 43-44.
are principally regulated and supervised by state banking commissioners; federally chartered banks are regulated and supervised by the OCC, a division of the Treasury Department.161 Meanwhile, the Federal Reserve regulates bank holding companies and the nonbanking affiliates of banks.162

This division of authority allows banking firms to choose to structure their operations so that they fall within the purview of the regulator that the organization believes may be the most accommodating.163 For example, a bank holding company that owns both state-chartered and OCC-chartered banks can determine to engage in an activity (e.g., municipal bond underwriting) in its state bank or through a subsidiary of the state bank, both of which would be regulated principally by its state chartering authority; in its national bank or a subsidiary of the national bank, which are regulated by the OCC; or at the holding company level, regulated by the Federal Reserve. Giving regulated entities such choices leads to competition among the regulators, as each seeks to enhance the scope of its authority and the number of institutions and activities that it oversees.164

161 See Murray A. Indick & Satish M. Kini, The Interstate Banking and Branching Efficiency Act: New Options, New Problems, 112 BANKING L.J. 100, 102 (1995). All federally insured banks also are subject to supervision by the FDIC. In addition, state banks that are members of the Federal Reserve System are subject to Federal Reserve examination and supervision. For a discussion of the complex system of overlapping jurisdictions of federal and state bank regulatory authorities, see supra note 52 and sources cited therein.


163 Banks may switch charters for other reasons as well, including lower examination fees and easier access to regulators: In 1999, twenty state banks switched to federal charters; twenty-two national banks switched to state charters. See Alan Kline, Bank in Memphis Plans to Switch to State Charter; Am. BANKER, Dec. 30, 1999, at 2.

164 Regulatory competition and turf fights between the Federal Reserve and the Treasury Department hindered congressional financial modernization efforts. The Federal Reserve sought to have new financial activities conducted exclusively in holding company affiliates, whereas the Treasury Department (on behalf of the OCC) argued that new financial activities should be permitted for banks and bank subsidiaries. See, e.g., Laura J. Cox, Note, The Impact of the Citicorp-Travelers Group Merger on Financial Modernization and the
Such agency turf battles, however, can also create undesirable regulatory risks. For example, regulators may ignore the risks associated with an activity and may fail to penalize excessive risk taking for fear that such action will lead a bank to switch charters or to house that activity in an entity that is supervised by a competing agency. Subordinated debtholders will serve as an important check on this form of regulatory arbitrage. Debtholders will have a vital interest in preventing excessively risky activities from being conducted in a bank in which they have invested, and they will penalize banks, through the various mechanisms outlined above, that seek to take advantage of excessively permissive regulatory authority. Unlike bank regulators, subordinated debtholders will have no competing pressures that will dampen their ability and interest in safekeeping the bank’s assets.

E. Opportunities for Further Financial Modernization

Finally, our subordinated debt proposal may lay the groundwork for further financial modernization—namely, authorization of the mixture of banking and commerce through the holding company structure. As a general matter, U.S. law has both barred banks from affiliating with firms that are engaged in commercial or non-financial businesses and prevented banks from engaging directly in commercial activities. The twin separations of banking and commerce have

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See supra text accompanying notes 53–55 regarding the singleness of purpose of investors, as opposed to government regulators.

166 Although Congress has just passed the Gramm-Leach-Bliley Act, at least some policymakers believe that further liberalization of restrictions in the financial services industry is warranted. See, e.g., Anason, supra note 11, at 1 (noting Senate Banking Committee Chairman Gramm’s appetite for further reform).

been maintained for several reasons. Banks have been prevented from affiliating with commercial firms because such banks may face conflicts of interest when they engage in lending activities. Banks may experience irresistible pressures from their commercial affiliates to extend credit, and otherwise lend support, to those enterprises or to withhold credit from their competitors. Banks have been prevented from engaging directly in commercial activities because such activities may pose risks to the safety of the bank. Commercial activities are viewed as inherently more volatile than traditional lending and deposit-taking activities, and are seen as likely to tax the ability of financial regulators to comprehend their supervisory charges.\textsuperscript{170}

To the extent that these concerns are warranted, and there is significant debate as to whether they are, our subordinated debt proposal may represent a vehicle that can be used to permit the mixture of banking and commerce, either through affiliation or within a universal bank. For example, once a bank has issued the required amount of subordinated debt (or perhaps some additional amount of subordinated debt to be determined by federal regulators), it could be free to affiliate with commercial enterprises. Whatever risks to the bank arise from its commercial affiliations would be counter-balanced by the monitoring role of the subordinated debtholders. In short, the bank would have a private-sector constituency that would help federal regulators to police transactions between the bank and its commercial affiliates. If the private sector deemed a particular affiliation between a bank and a commercial firm to expose the bank to undue risks or exploitation, the bank's subordinated debtholders would demand a risk premium from the bank or would negotiate covenants that would restrict the nature and extent of the transactions between the bank and that affiliate. Similarly, to the extent that a bank engages directly in risky commercial activities, subordinated debtholders would require a higher interest rate, insist upon restrictive covenants, deny credit or sell their debt into the market.

\textsuperscript{170} See, e.g., Felsenfeld, \textit{supra} note 169, at 35–52; Mattingly & Fallon, \textit{supra} note 58, at 32. Undue concentration of resources is another common concern voiced by opponents of mixing banking and commerce. Admittedly, to the extent that this mixture would have adverse macroeconomic or antitrust repercussions, a subordinated debt requirement does not address all of the problems of combining banks with nonfinancial businesses.
VI. POTENTIAL OBJECTIONS TO OUR MARKET DISCIPLINE APPROACH

As stated in the Introduction, this Article is not written upon a clean slate. Numerous commentators have registered opposition to market discipline approaches to bank regulation on various grounds. This Part examines some of the most common and powerful objections to market-based proposals and attempts to explain how these objections can be overcome. Although none of the criticisms are fatal to the market disciplinary project, a discussion of their strengths and weaknesses provides valuable insight into the limits of market discipline.

A. Investors Lack Adequate Information to Support a Market Discipline Approach

The objection: Market discipline can only be an effective complement or supplement to bank regulation if market participants have timely access to comprehensive and credible information about bank assets and activities. Investors simply do not have a sufficient quantity or quality of information about banks.

The response: Some theory and evidence suggest that market participants have less (and less reliable) information about banks than they do about other kinds of firms. The theoretical argument generally runs as follows: banks hold few fixed and easily valued assets and the risks to banks' mostly financial assets are hard to observe and easy for banks to change.¹⁷¹ The primary assets of most banks are loans to private-sector borrowers. The value of each loan in a bank's portfolio is hard to observe and is contingent on the terms of the loan contract and the health and riskiness of the borrower.¹⁷² The loan portfolio of


¹⁷² One study found that loan quality problems developed over a period of three to five years before market observers could see them. See Richard E. Randall, Can the Market
most banks is also volatile, as banks package and sell loans frequently into the growing secondary market for bank loans. The biggest banks, which have been shifting their activities over the past few years from more conventional lending into exotic securities and derivatives trading, are even more opaque than the smaller banks. The biggest banks are rapidly growing more dynamic, and their assets are quickly becoming more complex.

A substantial body of economic literature has examined the question of bank opacity, and the results have been mixed. Some studies have concluded that banking organizations are more opaque than non-banking companies. Studies by economists Donald Morgan and Richard Cantor and Frank Packer have shown that the Moody’s and Standard & Poor’s rating agencies have more ratings disagreements over bank holding companies than over other firms of comparable size and risk. Similarly, a study by Robert Avery, Terrence Belton and Michael Goldberg showed that risk premiums on bank-related long-term debt are virtually unrelated to traditional accounting measures of bank performance and that the risk premiums are only weakly related to ratings conferred by private-sector rating agencies. Finally, Gary Gorton and Anthony Santomero concluded that accounting measures of risk only marginally predict the market-determined volatility of bank assets.

Although these studies have shown that banks are somewhat opaque, many recent studies suggest that the market does exact an

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174 There is some evidence, however, that smaller banks are more opaque to the market. Morgan found that the probability of a ratings split between Moody’s and S&P decreases up to some level of bank assets. See MORGAN, supra note 171, at 15. Morgan also found, however, that the probability of a ratings split begins to increase again at some level of assets. The probability of a ratings split increases as a bank substitutes loans and leases for securities and as a bank moves securities into its trading account. See id. at 16.

175 See generally Richard Cantor & Frank Packer, The Credit Rating Industry, FED. RES. BANK OF N. Y. Q. REV., Summer/Fall 1994, at 1-26; MORGAN, supra note 171. Cantor and Packer found that Moody’s and S&P split over only 37% of the general sample of firms but over 63% of the banks. See Cantor & Packer, supra at 1-26. Morgan found that, controlling for risk and asset size, Moody’s and S&P are about 12% more likely to split over banks than over non-financial firms. See MORGAN, supra note 171, at 12.

176 See Avery et al., supra note 113, at 608.

177 See Gorton & Santomero, supra note 6, at 123-27.
institution-specific risk premium from banking organizations. Ju-
lapa Jagtiani, George Kaufman and Catharine Lemieux concluded
that, from 1992 to 1997, the market-priced credit risk for the debt of
banking organizations was determined by accounting risk measures,
private agency ratings and the regulatory rating of the borrower. Professors Mark Flannery and Sorin Sorescu found that, between
1983 and 1991, subordinated debt yields were sensitive to bank risk
and that the sensitivity increased as the government withdrew de facto
insurance coverage from uninsured liabilities. Moreover, a study by
Thomas Cargill found that, between 1981 and 1987, bank certificate
of deposit ("CD") rates reflected "CAMELS" scores, the system used
by federal banking regulators to rate the condition of banks. Herbert Baer and Elijah Brewer also found that rates of return to holders
of uninsured CDs were correlated with changes in the banks' market-
to-asset ratios and the volatility of bank returns on equity.

The empirical studies indicating the existence of some bank
opacity do not amount to much of an objection to the market disci-
pline hypothesis. First, the empirical studies that have shown a weak
correlation between market-exacted risk premiums and accounting
measures of bank risk only establish that the market uses more than
accounting data to assess the riskiness of banks. Unless research can
show that accounting measures of bank risk are the best predictors of
bank failures, these studies do not prove enough. Second, the empiri-
cal studies showing that rating agencies disagree over bank securities
more often than over non-bank securities only show that banks are
somewhat more opaque than non-banks. Slight relative opacity, how-
ever, does not imply that the market is unable to evaluate the riskiness
of banks; rather, it indicates only that the market considers assessing
bank value and risk somewhat more difficult than assessing non-bank
value and risk. Banks will pay for this relative opacity and consequent

178 Market participants generally believe that prices of existing bank subordinated debt
reflect risk differentials across organizations. See Using Subordinated Debt, supra note
64, at 16.

179 See Jagtiani et al., supra note 119, at 21-22.

180 See Mark J. Flannery & Sorin Sorescu, Evidence of Bank Market Discipline in Subordi-

181 See Thomas F. Cargill, CAMELS Ratings and the CD Market, 3 J. FIN. SERV. RES. 347,
353-55 (1989). CAMELS stands for Capital adequacy, Asset quality, Management, Earn-
ings, Liquidity and Sensitivity to market risks. See Federal Reserve Commercial Bank

182 See Herbert Baer & Elijah Brewer, Uninsured Deposits as a Source of Market Discipline:
23-29.
uncertainty since bond investors will demand a premium for it.183

Third, most of the instruments analyzed in the first set of empirical studies discussed above were short-term, and short-term investors do not care so much about borrower risk profile.184

Finally, and most importantly, the empirical studies conducted to date have suffered contamination from a bank regulatory environment that provides an implicit federal government guarantee to bank investors. If bank debtholders believe that the federal government will protect them from loss if their bank fails, and issuing banks understand this, debtholders will be unable to exact a risk premium from volatile banks. Although this implicit government guarantee is thought to protect uninsured creditors of only the biggest banks, it is precisely those banks that issue most of the debt that the empirical studies have analyzed. While the implicit guarantee has weakened over the past decade,185 most of the studies were performed when the guarantee was in full effect.

One method for improving the capital markets' ability to assess bank risk levels is to improve the quality and increase the amount of public disclosures that banks are required to make. Banks are already subject to a host of disclosure requirements. Publicly held banks and their holding companies are required to make annual, quarterly and special event reports to the SEC.186 Banks also are required to submit year-end consolidated reports of income and quarterly consolidated reports of condition,187 and make special disclosures in areas of heightened supervisory concern.188 The Basle Committee on Bank Supervision has repeatedly issued guidance to bank supervisors relat-
ing to increasing the transparency of banking organizations. Federal bank regulators have made similar proposals.

Banks already have some natural incentives to disclose information. For example, banks with a reputation for providing timely and accurate information to the public can access the capital markets more cheaply. Increased public disclosure about bank assets and operations will have the collateral benefit of reducing the potential for systemic disruptions of the financial landscape by improving the ability of market participants to distinguish strong banks from weak banks in troubled times.

B. Market Discipline Is Ineffective due to Federal Protection of Creditors

The objection: Market discipline can only be effective if market participants do not expect the government to compensate them for losses they may accrue in connection with their investments in banks. Federal bank regulators historically have been reluctant to close large failed banks and impose losses on creditors and uninsured depositors because of a fear that such substantial failures might destabilize the banking system.

189 See, e.g., Basle Committee on Banking Supervision, Enhancing Bank Transparency (visited Feb. 22, 2000) <http://www.bis.org/publ/bcbs41.htm>

190 See Ferguson, supra note 158, at 4

191 See Basle Comm. on Banking Supervision, supra note 189, at 5; see also Macey & Garrett, Market Discipline, supra note 80, at 226–27 (arguing that banks have a strong incentive voluntarily to disclose relevant financial information to depositors). A recent study by PriceWaterhouseCoopers also concluded that banks could raise their equity prices by disclosing more information. See Barbara A. Rehm, Fuller Disclosure Could Aid Bank Stocks, Study Says, AM. BANKER, Dec. 2, 1999, at 2.

There are also inherent limitations, however, on the amount and timeliness of public disclosure that banks can make: the quality of a bank's risk management system may be difficult to convey; comparing financial information across countries is a difficult task; a bank has an obvious need to preserve the confidentiality of certain business plans and certain information provided to it by its customers; and producing information is costly. See Basle Comm. on Banking Supervision, supra note 189, at 7–8.

192 See Basle Comm. on Banking Supervision, supra note 189, at 7; supra Part V.C. Even Professor Garten, perhaps the most prolific critic of market discipline approaches to bank regulation, admits that banks publicly disclose sufficient information to permit market participants to assess the riskiness of bank assets and activities. See Garten, Banking on the Market, supra note 80, at 131, 144–45. Professor Garten argues that the opacity problem does not relate to an investor's inability to assess the probability of a bank insolvency, but rather to the uncertain consequences to an investor of a bank insolvency. See id. at 148–50. This aspect of the opacity problem was powerfully addressed by FDICIA. See infra Part VI.B.

The implicit federal guarantee of the investments of creditors and uninsured depositors of large banking organizations—the "too-big-to-fail" doctrine—has historically placed a significant obstacle in the way of effective market discipline. FDICIA, however, requires the FDIC to resolve failed banks in the manner that imposes the lowest cost on the deposit insurance fund. Moreover, since January 1, 1995, the FDIC has been forbidden to take any action "that would have the effect of increasing losses to any insurance fund by protecting . . . depositors for more than the insured portion of deposits [or] creditors other than depositors." While these provisions of FDICIA may theoretically restrict the scope of the too-big-to-fail doctrine, it is not clear how restrictive they will be in practice. In order to implement a successful market discipline approach to bank regulation, the federal government must credibly commit not to insure the losses of the relevant market participants. The recent empirical

194 12 U.S.C. § 1823(c)(4) (1994). FDICIA preserves the federal bank regulators' ability to apply the too-big-to-fail doctrine, but only in connection with failures that would impose excessive systemic risks on the banking system. The FDIC may dispense with the "least-cost rule" only if two-thirds of the directors of the FDIC and two-thirds of the governors of the Federal Reserve Board so recommend in writing, and the Secretary of the Treasury agrees with the recommendation. See id. § 1823(c)(4)(G).

195 See 12 U.S.C. § 1823(c)(4)(E)(i) (1994). FDICIA also provides, however, that federal bank regulators may protect uninsured deposits in purchase and assumption transactions that are no more expensive than liquidations. See id. § 1823(c)(4)(E)(iii).

196 See Mantripragada, supra note 5, at 563-65 (arguing that FDICIA has not really removed the too-big-to-fail doctrine). Although the Federal Reserve Bank of New York's ("FRBNY") brokering of the bail-out of Long-Term Capital Management did not involve the use of public funds to save private creditors from losses, the FRBNY's actions indicate that the Federal Reserve remains concerned about the systemic risks resulting from the failure of a large financial institution. See Paul S. Nadler, Long Term Lessons from Long-Term Capital Management, SECURED LENDER, Jan./Feb. 1999, at 14; Financial Markets: Shadow Regulatory Panel Calls on Fed to Explain Role in Hedge Fund Bail Out, BNA BANKING DAILY, Sept. 29, 1998, at D2.

197 But see Garten, What Price Bank Failure?, supra note 7, at 1166-67 (arguing that failure policy should not be automatic and inflexible because the failure process is costly and failures may create systemic adverse effects on the FDIC and healthy banks); Richard E. Randall, The Need to Protect Depositors of Large Banks, and the Implications for Bank Powers and Ownership, NEW ENGLAND ECON. REV., Sept./Oct. 1990, at 63, 67-69 (arguing that removal of the federal government's implied support of uninsured bank creditors may destabilize the payments system and reduce the availability of short-term credit in the economy).

Professor Garten argues that bank failure policy should not be designed exclusively to focus on facilitation of market discipline of healthy banks. See Garten, What Price Bank Failure?, supra note 7, at 1176. Rather, minimizing losses to the bank insurance funds must be the primary goal. Garten's argument assumes that what the FDIC saves in the short-term by managing each failure to save the bank insurance fund is not outweighed in the long-term by the costs of bank failures caused by the decreased market discipline of investors.
studies cited in the preceding section suggest the government has made a reasonably credible commitment. We believe that federal regulators should not take any actions that would weaken the plausibility of this pledge.

C. Bank Investment Strategy Can Defeat Market Discipline

The objection: For market discipline to be successful, bank managers must alter their investment and activity strategies as a result of market influence. Bank managers, however, are not sensitive to declines in the market value of the bank’s securities because their primary source of funding is deposits (mostly insured deposits). Moreover, to the extent that a bank can finance its operations by insured deposits and internally generated cash flow, it will not need to access the capital markets and will not pay a penalty for declining stock or bond prices.

The response: As discussed above, market participants can discipline a bank in various ways. First, in addition to selling their investments in the bank and thereby signaling to other investors and bank managers that the bank is behaving badly, subordinated debtholders also will be able to control bank manager behavior through negotiated covenants in the debt indenture. Second, our proposal will require Subject Banks to access the capital markets once every two years, notwithstanding the amount of deposits or internally generated cash flow available to the bank. Third, banks, especially Tier I banks, are relying less on insured deposits to fund their operations and more on capital market instruments. Fourth, even in the absence of a

This Article demonstrates that market discipline by subordinated debtholders can work and that, therefore, these long-term costs will be high.

198 See generally Gorton & Santomero, supra note 6; Flannery & Sorescu, supra note 180. Although the FRBNY's actions in the fall of 1998 with respect to Long-Term Capital Management evidence a continuing federal government interest in preventing the failure of large financial firms, it is important to note that the Federal Reserve never offered to bail out LTCM's creditors with taxpayer money.


200 See supra notes 62-63 and accompanying text.

201 As of December 31, 1998, deposits represented 67.6% of the assets of FDIC-insured commercial banks in the United States; as of December 31, 1991, deposits represented 78.4% of such assets. Among Tier I banks, as of December 31, 1998, deposits represented 62.9% of assets; as of December 31, 1991, deposits represented 72.5% of assets. See FDIC, Statistics on Banking Fourth Quarter 1998, Table 105A, Number, Assets and Deposits of FDIC-Insured Commercial Banks (visited April 4, 2000) <http://www.fdic.gov/bank/statistical/>
need or desire to access the capital markets, bank managers will strive to avoid falling share prices or bond prices because such falling prices may reduce the manager's compensation, cause shareholders to replace managers for permitting the share prices to fall, or trigger a takeover.\textsuperscript{202}

D. Investors' Desires May Lead Bank Managers to Increase Risk Taking

The objection: Bank managers are naturally risk averse. Failure of their bank will result in a significant diminishment of the value of their human capital; consequently, bank managers will make conservative investments and engage only in low-risk activities. At the same time, investors generally diversify their investment portfolios to reduce firm-specific risk and hence maximize the risk-adjusted rate of return of their investments.\textsuperscript{203} Diversified investors have a greater tolerance for risk than does the federal government, since losses in one investment in the portfolio likely will be offset by gains in other investments in the portfolio. Hence, making bank managers more sensitive to the desires of their investors may lead to an increase in risk taking.\textsuperscript{204}

The response: As a preliminary matter, bank managers typically are substantial equityholders or stock option holders in their employer. As such, bank managers are not especially risk adverse.

Investors, especially debt investors, should be expected to reduce bank risk profiles. While there can be no doubt that investors increasingly are becoming more diversified, and that diversified investors care less about firm-specific risk than non-diversified investors, investor diversification does not pose a problem. First, and most importantly, even diversified investors care about the risk profile of their individual investments. They care about the nature of the risks because, in constructing investment portfolios, investors need to know

\textsuperscript{202} But see Van Der Weide, \textit{supra} note 67, at 69–71 (arguing that despite constraints managers still have room to engage in self-dealing and not decrease risk-taking activities). Because banks are usually wholly owned by a holding company and bank shares are typically not publicly traded, bank managers will act to protect the interests of bank holding company shareholders. Bank managers are often also managers at the holding company level. Moreover, in most cases dangerous activity at the bank level will be reflected by a decline in the share price of the parent bank holding company.

\textsuperscript{203} See \textsc{Brealey \& Myers}, \textit{supra} note 70, at 148–66.

\textsuperscript{204} See Garten, \textit{What Price Bank Failure?}, \textit{supra} note 7, at 1179.
the amount of negative correlation between packages of investments; they care about the quantity of risks because eliminating losses on any investment maximizes the value of the entire portfolio. Second, many investors are not diversified; the non-diversified investors, as well as the diversified investors with a large percentage of their portfolio invested in the subordinated debt of one issuer, will provide appropriate risk monitoring. Third, debt investors are different from stockholders. Because their upside gains are limited, debt investors have a direct risk aversion for each company in which they invest, despite diversification. Even diversified debtholders make efforts to ensure that their portfolio companies limit their risks.

E. Subordinated Debtholders Support Risky Activity when Facing Insolvency

The objection: Holders of heavily subordinated debt (like the debtholders in our proposal) will have equity-like risk preferences, especially as a bank approaches insolvency and the value of the bank’s equity approaches zero.

The response: Admittedly, subordinated debtholders will prefer riskier bank activities and projects as a bank approaches insolvency. For two reasons, however, this fact does not threaten the viability of the proposal presented in this Article. First, as discussed above, subordinated debtholders are appropriately risk averse in contexts prior to impending insolvency, and most of the decisions that impel banks into insolvency are taken prior to the appearance of insolvency on the horizon. Moreover, even in the face of an impending insolvency, subordinated debtholders are more risk averse than equityholders: equityholders will enjoy all of the benefits of the success of a risky project, but debtholders will enjoy benefits only up to the return of their principal and accrued interest. Debtholders also are more likely than equityholders to receive their invested principal back in an insolvency proceeding.

F. The Short-Term Perspective of Market Participants Creates Risks

The objection: Capital markets investors are fickle and too short-term oriented for the good of banks.
The response: While this argument with respect to shareholders is off the mark,\textsuperscript{209} it is true that subordinated debtholders under our proposal will have their principal returned as soon as six years after the initial investment. While six years is something less than an eternity (the time horizon of bank regulators), it is a substantial period of time. The slippage resulting from the difference in time horizons should be more than offset by the gains accruing to the banking system from increasing the amount of bank monitoring by sophisticated fixed claimants and forcing banks to go into the capital markets every two years.

G. Investors Will Not Assume the Role of Monitoring Banks

The objection: Holders of securities of a bank with an escalating risk profile, especially holders of debt securities whose disciplining tools are crude and generally negative in nature, will find it cheaper to sell the securities and sever their connection to the bank than to maintain their investment and attempt to alter the bank’s behavior.\textsuperscript{210}

The response: This may be true with respect to holders of subordinated debt securities in Tier I banks. These debt securities will be bought and sold in a liquid, public market. For most of these investors, the cheapest method of expressing their thoughts about the prospects of a bank may be to sell the debt. Such selling pressure, however, will reduce the market price of the bank’s debt and signal to the market, to bank management and to bank regulators that the market frowns upon the bank’s increasing risk profile. Because our proposal requires banks to enter the debt capital markets every two years, such selling pressure and the resultant declining market price also will increase the future cost of funding to the bank.

Holders of subordinated debt in Tier II banks, however, may not enjoy a liquid market in which to sell their securities. Moreover, the federal securities laws will prevent them from selling any privately issued debt for several years.\textsuperscript{211} For these investors, it is unlikely that exit will be seen as a primary investment management strategy.

\textsuperscript{209} See Van Der Weide, supra note 67, at 61–62.


\textsuperscript{211} See 17 C.F.R. § 230.144 (1999).
H. Collective Action Problems Will Prevent Market Discipline

The objection: Monitoring by market participants is costly. Holders of bank securities will be too diffuse to exercise control over the bank; collective action problems will prevent market participants from providing effective discipline over bank behavior.212

The response: To the extent that a set of market participants determines that collective action problems—such as high information costs and free riders—pose a threat to the quality of their investments, nothing would prevent them from appointing one of their own as a compensated monitoring agent. Institutional investors routinely appoint an indenture trustee to represent their interests with respect to a bond issuance.213 Bank lenders also routinely appoint an agent bank to represent their interests with respect to syndicated loans.214 In addition, to the extent that market participants believe that their investments will suffer because collective action problems will interfere with their monitoring ability, market participants will pass along those costs to borrower banks. As a consequence, banks will likely assist market participants in establishing some sort of agent to represent their interests.215 Moreover, disciplining through direct monitoring is only one method of disciplining. The requirement that a bank return to the capital markets periodically and the ability of market participants to withdraw their investment and reduce the share or bond price of the bank are also effective mechanisms. No collective action problem will interfere with these disciplinary mechanisms.

Holders of subordinated debt, who can make intelligent investment decisions ex ante, can solve the collective action problem related to ex post monitoring by investing in firms that must continually return to the capital markets. A bank under our proposal will not attempt to increase its riskiness at current debtholders' expense because it knows it will have to return to the market to issue additional debt in the near future.

I. Market Participants Will Not Be Able to Affect Bank Behavior

The objection: Market discipline will not be effective because market participants are unable to take actions to align a bank's incentives

212 See Gouvin, supra note 5, at 323; Garten, Market Discipline Revisited, supra note 43, at 208.

213 See BREALEY & MYERS, supra note 70, at 684.

214 See, e.g., Gooch & Klein, supra note 92, at 131-207.

215 See also Macey & Garrett, Market Discipline, supra note 80, at 232.
with their own. Bondholders are unable to constrain company behavior through their contractual covenants. The typical covenants negotiated by debtholders (asset maintenance and prohibitions on incurring senior debt) are unduly restrictive for a bank and would be ineffective in controlling bank risk. Banks, because of the very nature of the business of banking, would insist on preserving their flexibility to substitute assets without substantial restriction. Banks can increase their risk profile very easily by substituting assets.

The response: Admittedly, bank debtholders would probably not negotiate strict asset sale prohibitions or strict prohibitions on the incurrence of senior debt. Instead, they would likely negotiate minimum financial ratios, activity restrictions, and limits on the bank’s ability to incur additional senior debt. Bank debtholders would likely insist on a covenant that prevents the bank from entering “critically undercapitalized” status, since FDICIA prevents such banks from making any payments on their subordinated debt. Furthermore, bank regulators will be able to learn a great deal about preventing the insolvency of financial institutions by observing the kinds of covenants that bank debtholders employ in their bond indentures and reviewing over time the efficacy of the various covenants in controlling bank risk.

Public stockholders and bondholders also can punish bad bank behavior by selling their shares or their debt securities. This selling pressure will lower the price of the bank’s stock or debt, as the case may be, and will signal to the market that bank managers are taking actions inconsistent with the best interests of bank shareholders or debtholders. Bank managers will have trouble retaining their jobs as the value of the bank’s public securities falls. Moreover, if the bank must raise funds in the capital markets on a consistent basis, it will find that excessively risky behavior and the resultant drop in securities prices will make such financing substantially more expensive.

\[216\] See Garten, What Price Bank Failure?, supra note 7, at 1181–83. Although Garten supports her argument by pointing out that deposit contracts rarely include such covenants, the position of depositors with respect to a bank is very different from a debtholder: deposits are liquid, short-term investments; depositors are covered by insurance; and depositors generally are not investing enough to make negotiating for covenants worthwhile.


J. Subordinated Debt Is an Unattractive Form of Financing

The objection: Banks find raising debt and equity in the capital markets to be very expensive. Banks do not issue much subordinated debt today because it would be an expensive form of financing and because there is not sufficient market appetite for the subordinated debt of banks. Moreover, the market for existing bank subordinated debt is a dealer market; regulators will have a difficult time acquiring reliable price information on the debt.

The response: The market for the subordinated debt of banking organizations with greater than $50 billion in assets is actually highly liquid. The institutional investors that dominate the demand side of the market and the bank subordinated debt dealers agree that the secondary market prices for these securities are very efficient. Although some market participants have admitted that publicly available bank debt prices are hard to locate, expectations are that such price information will become more public in the near future.

A handful of Web sites have recently sprung up to provide bond price information on a wide variety of municipal and corporate debt issues. Moreover, dozens of new internet companies are scrambling to establish on-line bond exchanges. While their efforts have not displaced the bond trading desks of the established investment banks, which make sizable commissions from bond trading, the SEC has made it a priority to illuminate debt security prices. The liquid market for large banking organization debt securities should only grow more transparent in the coming years.

Admittedly, the market for smaller bank subordinated debt is currently thin. A significant cause of the lack of volume in this market, however, is the Capital Guidelines adopted by the bank regulatory agencies. Banks do not issue much subordinated debt because such debt does not count as tier 1 capital and does not fully count as tier 2 capital under the Capital Guidelines. Our proposal would simply

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220 See id. at 44.
221 See supra note 64, at 44.
222 See id. at 49.
223 Two examples of these new Web sites, investinginbonds.com and tradebonds.com, can be used to find information on bond prices.
225 See supra text and accompanying notes 109-114.
counteract this regulatory obstacle. Some banks may also resist issuing nondeposit debt because they do not want to be bound by the covenants a nondeposit creditor would impose. It is precisely these sorts of covenants that can impose additional discipline on a bank.

K. Investors Will “Run” in Adversity

The objection: Market discipline will have perverse systemic effects—the relevant private investors will exit a bank quickly as adversity approaches, hastening a depletion of the bank’s capital and accelerating the bank’s approaching insolvency.226

The response: Exit by subordinated debtholders can only be accomplished through sale of the securities to another purchaser. The debt instrument proposed in this Article is not puttable. The debt securities will remain outstanding until maturity, at least six years after issuance. Hence, exit by subordinated debtholders does not create the type of systemic risk of a run on the bank that exit by depositors creates. While our proposal does permit one-third of the subordinated debt capital to leave the bank every two years, this sort of a staggered long-term departure of capital should not pose anything like the systemic threat of a deposit run. Indeed, the inability of a bank to roll over the required amount of subordinated debt would provide a valuable signal to regulators that the bank needs attention.

Admittedly, however, there is some risk that the price and other signals transmitted by subordinated debtholders will serve not only as risk indicators for bank regulators but also as a signal to bank depositors and other creditors. Those depositors—especially large, uninsured depositors—may then “run” when subordinated debtholders indicate concerns about the risk profile of a particular institution. Although the likelihood of such runs cannot be completely dismissed, we think that the risk of uninsured depositor runs precipitated by subordinated debt signals will not be severe. As noted in Part III.B. above, many uninsured depositors are not sophisticated investors, and they will not pay careful attention to the informational conveyances of subordinated debtholders. Accordingly, we expect that federal regulators will react with greater alacrity to subordinated debt signals than depositors and that regulators (and subordinated debtholders) will take measures to counteract risky bank activities before the situation becomes so severe as to cause a fatal depositor run.

226 See Garten, Banking on the Market, supra note 80, at 153–56, 162.
L. Federal Macroeconomic Policy Could Be Inhibited by Market Discipline

The objection: Market discipline may interfere with a bank’s capacity to assist federal regulators in implementing macroeconomic policy. Federal exhortations to lend or provide liquidity to the economy may run counter to the interests of debtholders.

The response: The Federal Reserve’s most powerful weapons for implementing macroeconomic policies—buying and selling government securities, altering reserve requirements for banks, and changing the discount and federal funds borrowing rates—will not be affected by the existence of additional subordinated debt in the capital structure of banks; these methods merely make quantitative adjustments to the interest rate environment in which banks operate. When the Federal Reserve and other federal regulators attempt to effect macroeconomic policies through more informal means (for example, urging banks to raise or lower their underwriting criteria), a bank’s profit motives may run counter to the federal regulatory nudge. This conflict of interest between banks and regulators is not made worse, however, by the presence of subordinated debt investors. Indeed, where the informal nudge from regulators is a recommendation of stricter loan underwriting standards, debtholders will be more likely to support this goal than the equityholders whom such debtholders partially replace in this proposal.

CONCLUSION

Requiring large banks to issue subordinated debt promises to remedy many of the shortcomings of government supervision and regulation. Actual and prospective holders of bank subordinated debt will constrain bank risk taking roughly in accordance with the wishes of the federal government and without the bureaucratic and other inefficiencies entailed in governmental regulation. Holders of bank subordinated debt, as they buy and sell bank debt securities in the secondary market and negotiate purchases in the primary market, will also signal to federal regulators the private sector’s view as to the value of a bank’s enterprise. While such a market discipline approach

228 See PURPOSES & FUNCTIONS, supra note 33, at 5.
should not supplant government regulation, supervision and examination of banks, it can and should serve as an effective complement to government oversight of financial institutions.