

Boston University School of Law

Scholarly Commons at Boston University School of Law

Faculty Scholarship

2010

Bonding Bankers: Notes Toward a Governance Approach to Risk Regulation

Frederick Tung

Follow this and additional works at: https://scholarship.law.bu.edu/faculty_scholarship



Part of the [Banking and Finance Law Commons](#), and the [Insurance Law Commons](#)



BONDING BANKERS: NOTES TOWARD A GOVERNANCE APPROACH TO RISK REGULATION

FREDERICK TUNG*

I. INTRODUCTION

Important regulatory failures have been identified in the wake of the recent financial crisis, and comprehensive regulatory reform has been much on the minds of policymakers. Reform proposals call for a number of significant changes to the scope and structure of financial regulation to address systemic risk.¹ With banking regulation, however, the twin tools of capital requirements and external supervision seem to remain the dominant regulatory levers.² In this short discussion, I introduce the contours of an

* Robert T. Thompson Professor of Law and Business, Emory University School of Law. For helpful comments, I owe special thanks to symposium participants at *The Credit Crash of 2008: Regulation within Economic Crisis* at the Moritz College of Law, The Ohio State University.

¹ On scope, previously unregulated or lightly regulated financial entities—hedge funds and private equity firms most prominently—are likely to become subject to more exacting regulation and oversight. Press Release, U.S. Dep't of Treasury, Treasury Outlines Framework for Regulatory Reform (March 26, 2009), available at <http://www.financialstability.gov/latest/tg72.html> (proposing registration for advisers to hedge funds and other private pools of capital whose assets under management exceed a certain threshold). On structure, many have called for some form of unified financial regulatory authority to assume jurisdiction over all financial institutions, including banks, savings and loans, insurance companies, investment banks, and hedge funds. *Id.* (calling for a single independent systemic risk regulator). The Federal Reserve could be designated as the primary systemic risk regulator. See Stephen Labaton, *Some Lawmakers Question Expanded Reach for the Fed*, N.Y. TIMES, June 8, 2009, available at <http://www.nytimes.com/2009/06/18/business/18regulate.html?dbk> (noting the controversy over President Obama's proposal to expand the Federal Reserve's powers to police systemic financial risk). Or perhaps a council of financial regulators could be formed. See Edmund L. Andrews, *Bernanke, in Nod to Critics, Suggests Board of Regulators*, N.Y. TIMES, October 1, 2009, available at <http://www.nytimes.com/2009/10/02/business/economy/02regulate.html?scp=3&sq=committee%20regulators&st=cse>.

² To the extent that policymakers have considered bank executives' compensation, they have focused primarily on limiting it, or imposing vague prohibitions on compensation that promotes excessive risk taking. See Deborah Solomon & Mark Maremont, *Bankers Face Strict New Pay Cap*, WALL ST. J., Feb. 14, 2009, at A1,

important supplement to the existing approach, a governance approach that uses bank executives' compensation arrangements as a policy lever.³ I propose that bank executives receive some portion of their compensation in the form of their own bank's publicly issued debt securities. Taking a page from the pay-for-performance movement, I argue that paying bank executives—at least in part—with bank debt securities can blunt the risk taking proclivities that shareholder-centered corporate governance encourages and that equity-based compensation exacerbates. My proposal piggybacks on prior suggestions that banks be required to issue subordinated debt as a device to induce market discipline to counter excessive risk taking.

Requiring bankers to hold their own bonds would not substitute for traditional external regulation but would enhance it by directly altering bank managers' incentives toward risk taking. "Unlike capital and asset regulation, which have at best *indirect* effects on managerial incentives and thus on managerial decisions, altering top-management compensation is a direct and effective way of influencing managerial return and risk-taking

available at <http://online.wsj.com/article/SB123457165806186405.html>; Alison Vekshin & Erik Schatzker, *Bair Says Regulators Should Set Banker Pay Standards*, BLOOMBERG.COM, Aug. 5, 2009, <http://www.bloomberg.com/apps/news?pid=20601087&sid=agRkbLlnc6Q>. In addition, the Obama administration has appointed attorney Kenneth Feinberg as a special master to oversee executive compensation at seven firms that have received "exceptional assistance" from the government in the form of federal bailout funds. See *Times Topics: People, Kenneth R. Feinberg*, N.Y. TIMES, June 10, 2009, http://topics.nytimes.com/topics/reference/timestopics/people/f/kenneth_r_feinberg/index.html?inline=nyt-per.

Only very recently have a few concrete proposals emerged to structure bank executive compensation to curb risk taking, in ways distinct from my proposal. See Lucian A. Bebchuk & Holger Spamann, *Regulating Bankers' Pay*, 641 GEO. L. J. __ (forthcoming 2009-2010) (proposing that financial executives' pay should include not just their firms' equity, but should reflect a diversified basket of their firms' securities), available at <http://ssrn.com/abstract=1410072>; Sanjai Bhagat & Roberta Romano, *Reforming Executive Compensation: Focusing and Committing to the Long-Term*, 26 YALE J. ON REG. 359 (2009) (arguing that financial executives' equity-based compensation be entirely in the form of restricted stock and restricted stock options that must be held until several years after they have left their firms), available at <http://ssrn.com/abstract=1336978>. While these proposals, like mine, may help to blunt financial executives' risk taking incentives, they do not incorporate a direct mechanism to impose market discipline on banks and their executives for excessive risk taking, a benefit that subordinated debt compensation offers.

³ My discussion is relevant for other depository institutions as well, including thrifts and credit unions. For convenience, I will refer to them collectively as "banks," as they all share the regulatory issues discussed herein.

incentives.”⁴ In Part II, I explain the special regulatory and governance problems of banks. Part III describes my bank executive compensation proposal. Part IV concludes.

II. BANKS AND MORAL HAZARD

A bank is a delicate institution. Its predominant creditors are depositors, who are typically quite numerous, with each holding only a relatively small claim against the bank in the form of a deposit account. A depositor can ordinarily withdraw her funds on deposit at any time, effectively calling her loan to the bank by demanding immediate repayment. The bank’s ability to effect this routine transaction and to attract future deposits, however, depends on public confidence in the bank’s ability to do so. In essence, a bank is a confidence scheme.

Banks of course do not hold all their depositors’ cash in their vaults. Instead, banks aggregate their demand deposits, relending them in the form of fixed-term loans. What this means in balance sheet terms is that banks’ assets and liabilities are mismatched. Most of their liabilities—in the form of demand deposits—are volatile, potentially short-term loans, but their assets are typically longer-term loans. Because of this mismatch of relatively illiquid assets with extremely liquid liabilities, banks are vulnerable to runs. Historically, fear of a bank’s imminent failure triggered a frenzy of depositors all wanting their money back at the same time. In this scenario, individual depositors face a collective action problem. When every other depositor is racing to the bank to withdraw her funds before the bank fails, then I will, too. I will want to retrieve my money before the bank window slams shut for good. The run becomes a self-fulfilling prophecy, causing a liquidity crisis even at a solvent bank, which causes the bank to fail.

Deposit insurance addresses this peculiar balance sheet of banks. In the wake of the Great Depression, Congress established the Federal Deposit Insurance Corporation (FDIC) to insure the deposits of member banks. The federal guarantee of bank deposits prevents most runs because depositors are confident that FDIC insurance will cover failed banks’ deposit liabilities.⁵

⁴ Kose John et al., *A Theory of Bank Regulation and Management Compensation*, 13 REV. FIN. STUD. 95, 97 (2000) (arguing that FDIC deposit insurance pricing should account for bank managers’ compensation arrangements).

⁵ Until recently, the ceiling on deposit insurance was \$100,000 per depositor. The passage of EESA temporarily raised the basic limit to \$250,000, which is set to

Deposit insurance creates problematic incentives, though. Even with nonfinancial firms, which are less levered and not generally at risk of having to pay off their major liabilities on demand, a conflict exists between equity holders and creditors. As the finance canon has taught us, debt and equity generally hold differing risk preferences. Because lenders enjoy only a fixed upside—their interest payments and return of principal at a loan's termination—but equity's upside is unlimited, firm managers bent on maximizing shareholder wealth will pursue riskier investments than lenders prefer.⁶ High leverage generally magnifies this debt-equity conflict and managers' risk taking tendencies.⁷ With banks, this agency cost of debt is even worse.

Ordinary firms' contract creditors understand firm managers' risk taking predilections, so these creditors bargain for constraints on managers and monitor compliance.⁸ In addition, excessive risk taking increases borrowing costs for ordinary nonfinancial companies. At the limit, a risky firm may not be able to borrow at any price. However, banks' major creditors—insured depositors—do not impose these contract or market constraints on risky banks. Depositors do not monitor or price their credit to account for insolvency or liquidity risk because FDIC insurance covers the risk. Bank managers may shirk or steal; they may faithfully pursue wealth maximization for shareholders by extending risky high-interest loans. In any event, depositors do not care. They are largely indifferent to bank risk taking.⁹

return to \$100,000 after December 31, 2009. Emergency Economic Stabilization Act, Pub. L. No. 110-343, 122 Stat. 3765 (2008). See also Letter from FDIC, Financial Institution Letter, Deposit Insurance Coverage Temporary Increase in Coverage, FIL-102-2008 (Oct. 3, 2008), available at <http://www.fdic.gov/news/news/financial/2008/fil108102.pdf>.

⁶ Michael Jensen & William Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure*, 3 J. FIN. ECON. 305, 334 (1976) (discussing the agency costs of debt versus equity).

⁷ *Id.*; see also Teresa A. John & Kose John, *Top-Management Compensation and Capital Structure*, 48 J. FIN. 949, 951 (1993).

⁸ Banks, for example, play an important monitoring role for their borrowers. See Frederick Tung, *Leverage in the Board Room: The Unsung Influence of Private Lenders in Corporate Governance*, 57 UCLA L. REV. 115 (2009), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1356662.

⁹ The product market discipline that affects nonfinancial firms also does not operate on banks. In a competitive market for deposit taking and other financial services, customers would care about bank solvency and would channel their deposits accordingly. FDIC insurance eliminates financial stability as a margin of competition among banks. Moreover, deposit insurance premiums are not finely calibrated to account for the particular risks posed by individual banks, so absent perfect regulatory oversight, managers have an incentive to externalize losses to the

Deposit insurance does not eliminate a creditor, of course; it merely substitutes the government for depositors as the major creditor of the bank, which ultimately gets stuck with the losses if the bank fails. The government as creditor has an economic interest in constraining managerial slack and excessive risk taking. Regulatory agencies and their bank examiners represent the government in this endeavor. Unlike private creditors of nonfinancial firms, however, regulators do not have their own money on the line. So while they possess significant expertise and enjoy important regulatory powers, they may lack the strong incentives of private lenders toward efficient monitoring. Private lenders with their own money on the line will expend resources monitoring only to the point where the marginal cost of monitoring does not exceed the marginal benefit. Government regulators do not have such finely honed incentives. The extent of their monitoring is politically determined. In some cases, their regulation and supervision may be excessive; in others, it may be insufficient. The prospect of regulatory capture of course also lurks.

In this context, private-sector monitoring and market discipline may be useful adjuncts to regulatory oversight. Current banking law recognizes as much. For example, the largest national banks are required to issue long-term investment grade unsecured debt if they control a financial subsidiary.¹⁰ My proposal builds on this market discipline approach by giving bank managers direct market-based incentives to curb excessive risk taking.

III. BONDING BANKERS

Examination and supervision impose useful limits on bank risk taking, and capital requirements help assure banks' solvency. However, these approaches seem indirect and second best for not addressing managerial incentives.¹¹ Instead of relying solely on these indirect influences, regulators may be able to bond bank executives to more prudent banking practices with pay-for-performance incentives that include instruments that are sensitive to risk. Publicly traded subordinated debt securities may be ideal for this task. Compensating bankers at least in part with subordinated debt may offer bankers the right incentives to avoid excessive risk.

insurance pool—and indirectly to the healthy banks that contribute to the pool and the taxpayers that ultimately stand behind the insurance pool.

¹⁰ 12 U.S.C. § 24a(a)(3).

¹¹ See John, et al., *supra* note 4, at 97.

A. *Standard Pay for Performance*

The standard corporate governance arrangements that affect managers' decision making—fiduciary duties and shareholder voting, for example—are generally designed to benefit the firm's equity holders.¹² Similarly, pay-for-performance compensation—typically in the form of equity or equity-based options—intends to overcome managers' risk aversion in order to align their incentives with shareholders' more risk-preferring interests. Otherwise, managers with firm-specific human capital investments in their firms might be less willing to pursue risky but potentially profitable projects. Their undiversifiable human capital investments make them imperfect agents for diversified shareholders.¹³

The pay-for-performance movement of the 1990s led boards of directors and their compensation consultants to adopt equity-based compensation schemes.¹⁴ Tax code changes abetted this trend. In general, employee compensation is deductible to the employer firm as a business expense. Since 1994, only the first \$1 million of non-performance based compensation for public company executives is deductible.¹⁵ As a result of these changes,¹⁶ the percentage of executive compensation in the form of equity jumped from 37% to 55% in the ten years ending in 2003.¹⁷ Pay-

¹² Jon Macey and Maureen O'Hara have suggested broadened fiduciary duties for bank directors to include creditors along with shareholders as beneficiaries. In particular, they propose that bank directors consider solvency risk "explicitly and systematically" in their decision making, upon pain of personal liability for failing to do so. Jonathan R. Macey & Maureen O'Hara, *The Corporate Governance of Banks*, FRBNY ECON. POL'Y REV., April 2003, at 91, 92. This approach may be problematic, however. Duties to multiple constituents may render bank managers accountable to no one. Jonathan R. Macey, *An Economic Analysis of the Various Rationales for Making Shareholders the Exclusive Beneficiaries of Corporate Fiduciary Duties*, 21 STETSON L. REV. 23, 36 (1991). More generally, corporate duties seem a rather blunt device for regulating risk taking, and may invite 20-20 hindsight litigation in the aftermath of a bank failure.

¹³ See Michael C. Jensen & Kevin J. Murphy, *CEO Incentives—It's Not How Much You Pay, But How*, HARV. BUS. REV., May-June 1990 at 138, 142. With only fixed compensation, managers may also be tempted shirk or to build empires, since pay is typically associated with firm size. *Id.* at 150.

¹⁴ See, e.g., *id.* at 141.; see also Michael C. Jensen & Kevin J. Murphy, *Performance Pay and Top-Management Incentives*, 98 J. POL. ECON. 225, 235 (1990).

¹⁵ 26 U.S.C. Internal Revenue Code § 162(m) (2006).

¹⁶ Evidence suggests that the enactment of section 162(m) has reduced salaries and increased pay-for-performance sensitivity. See Tod Perry & Mark Zenner, *Pay for Performance?: Government Regulation and the Structure of Compensation Contracts*, 62 J. FIN. ECON. 453, 456 (2001).

¹⁷ Lucian Bebchuk & Yaniv Grinstein, *The Growth of Executive Pay*, 21 OXFORD REV. ECON. POL'Y 283, 289 tbl. 4 (2005). available at <http://ssnr.com/abstract=648682>.

for-performance sensitivity for CEOs—typically measured by the change in CEO wealth for every \$1,000 change in shareholder wealth¹⁸—increased more than tenfold between 1980 and 1999.¹⁹ Compensation for bank officers currently tracks the same basic shareholder-based incentive framework, and managers' equity stakes have been shown to be significantly correlated with bank returns and risk.²⁰

Whether or not pay for performance has been generally good for shareholders is the subject of some debate.²¹ For bank managers, however, equity-based compensation may encourage excessive risk taking that is inimical to the public interest in bank safety and soundness. Aligning managers' interests more closely with those of bank equity holders simply exacerbates the moral hazard that accompanies deposit insurance. High leverage, coupled with the fact that banks' major creditors—insured depositors—have no stake in curbing banks' risk taking, already encourages managers to choose risky strategies, even those with negative expected value. Equity-based compensation merely adds fuel to the fire. It gives bank managers a direct personal stake in the unlimited upside they might potentially enjoy with high risk, high return strategies, an approach that bank regulators typically wish to discourage.²²

B. *Issuing Public Subordinated Debt*

The idea of requiring banks to issue public debt securities has been the subject of discussion for several decades.²³ An issue of subordinated

¹⁸ See Jensen & Murphy, *supra* note 19, at 229.

¹⁹ Bengt Holmstrom & Steven N. Kaplan, *The State of US Corporate Governance: What's Right and What's Wrong?*, 15 J. APPLIED CORP. FIN. 8, 12 (2003).

²⁰ See Anthony Saunders et al., *Ownership Structure, Deregulation and Bank Risk-Taking*, 45 J. FIN. 643, 644 (1990).

²¹ For critical views, see LUCIAN BECHUK & JESSE FRIED, *PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION* (2004); see also Lucian Arye Bebchuk, Jesse M. Fried, & David I. Walker, *Managerial Power and Rent Extraction in the Design of Executive Compensation*, 69 U. CHI. L. REV. 751, 753 (2002); Charles M. Yablon, *Overcompensating: The Corporate Lawyer and Executive Pay*, 92 COLUM. L. REV. 1867, 1880 (1992) (reviewing GRAEF CRYSTAL, *IN SEARCH OF EXCESS* (1991)).

²² One commentator even argues that pay-for-performance sensitivity should be accounted for in the pricing of deposit insurance. See John, *supra* note 4, at 98.

²³ See Mark J. Flannery & Sorin M. Sorescu, *Evidence of Bank Market Discipline in Subordinated Debenture Yields: 1983-1991*, 51 J. FIN. 1347, 1348 (1996); see also Douglas D. Evanoff & Larry D. Wall, *Sub-debt Yield Spreads as Bank Risk Measures*, 20 J. FIN. SERVICES. RES. 121, 122 (2001); William W. Lang & Douglas D. Robertson, *Analysis of Proposals for a Minimum Subordinated Debt Requirement*, 54 J. ECON. & BUS. 115, 124124123 (2002). Under the Gramm-

debt—junior to depositor liabilities—imposes discipline on the issuing bank in at least two ways. First, debt holders contract with issuers for covenants that constrain issuers' risk taking, and debt holders are typically sophisticated institutional investors with the resources and expertise to monitor their borrowers. Second, the trading price of the subordinated debt is sensitive to the bank's risk taking. Unlike depositor creditors, bondholders do not enjoy federal insurance against losses and cannot demand immediate repayment. If the bank were to fail, bondholders would be repaid only after all depositors—including uninsured depositors—were repaid in full. With a long- or medium-term bond, the bondholder is invested in the bank's future.

Banks engaging in excessively risky strategies will likely see their subdebt trading prices drop, giving valuable information to both market participants and regulators. In the face of real trouble, debt holders may either take action to enforce their covenants—typically a very public maneuver—or they may sell. In either case, information is made public. Empirical evidence supports the view that subordinated debt imposes market discipline on banks.²⁴

In addition to medium-term maturity for the bonds, proposals for mandatory issuance of subordinated debt also typically recommend relatively frequent staggered periodic issuance—say, every two years—in order to force the bank continually to return to the public capital markets for refinancing.²⁵ So in addition to the medium- to long-term focus driven by the maturity of the bonds, bank managers would have incentives toward continual short-term vigilance as well, in order to keep bank borrowing costs low. A bank taking on excessive risk would pay a higher interest spread when it went to sell subordinated debt in the public bond markets.

Leach-Bliley Act (GLB), a large FDIC member bank wishing to control a financial subsidiary must have an issue of highly rated debt outstanding. Gramm-Leach-Bliley Financial Modernization Act, Pub. L. No. 106-102, 113 Stat. 1338 (1999) (codified as amended at 15 U.S.C §§ 6801-6827 (1999)). GLB also commissioned the Federal Reserve Board and the Treasury Department to study the feasibility of requiring large banks and bank holding companies to issue subordinated debt as a device to improve market discipline. Gramm-Leach-Bliley Act § 108, 15 U.S.C. § 6808(a) (2006).

²⁴ See Kose John et al., *Outside Monitoring and CEO Compensation in the Banking Industry* (Oct. 2008), available at <http://ssrn.com/abstract=497922> (finding a statistically significant relationship between the degree of subordinated debt holder monitoring and pay-for-performance sensitivity); see also Evanoff & Wall, *supra* note 28, at 122; Flannery & Sorescu, *supra* note 28, at 1356-1362.

²⁵ The proceeds of each issuance would be used to retire some portion of outstanding subordinated debt. For example, a bank might issue \$100 million worth of 6-year bonds every two years. By the end of year six, the bank would have \$100 million of subordinated debt maturing every two years. The proceeds of each new issuance would be used to repay the maturing tranche of debt.

C. Pay for Less Risky Performance

For incentive purposes, the form of compensation is crucial, as Michael Jensen and Kevin Murphy declaimed in the title of their famous Harvard Business Review article, *It's Not How Much You Pay, But How*.²⁶ In the same way that equity and equity-based options help align managers' incentives with those of shareholders, including debt would shift managers' incentives away from risk-preferring equity to align more closely with more risk averse debt holders. The greater the proportion of bank managers' wealth that is in the form of subordinated debt, the less risky they are likely to be with the bank's business strategies. The presence of debt in managers' compensation packages may more closely align their interests with regulators' in assuring banks' safety and soundness.²⁷

Salary, pensions, and other fixed aspects of executive compensation already serve to some extent as debt-like compensation, since they give managers fixed claims against their firms. Empirical evidence suggests that this inside debt dampens CEOs' risk-shifting incentives. Studies have linked the level of CEOs' pensions with reduced risk taking.²⁸ Including subordinated debt securities improves on this incentive structure because risk-related fluctuations in the trading price of the debt may promptly and directly affect bank managers' wealth. In this way, the fine market reflection of managerial risk taking generates both important incentive and information effects.

A broad incentive system would also include holding requirements for this subordinated debt compensation. Especially if the bank adopted a rolling schedule of periodic debt issuance as described above, it would make sense for managers to receive subordinated debt from each issue and to be required to hold the debt for some significant portion of its maturity. This holding requirement, coupled with opportunities for managers to sell a

²⁶ See Jensen & Murphy, *supra* note 18.

²⁷ Perfect alignment of course is not desirable; regulators might be perfectly happy with very low risk and return, though investors would not.

²⁸ See Rangarajan K. Sundaram & David L. Yermack, *Pay Me Later: Inside Debt and Its Role in Managerial Compensation*, 62 J. FIN. 1551, 1557 (2007) (finding a positive association between large CEO inside debt holdings and lower risk taking); Joseph Gerakos, CEO Pensions: Disclosure, Managerial Power, and Optimal Contracting, Pension Research Council Working Paper 2007-5, April 23, 2007, available at: <http://ssrn.com/abstract=982180> (finding higher CEO pension values in firms with higher credit quality); Chenyang Wei & David Yermack, Stockholder and Bondholder Reactions to Revelations of Large CEO Inside Debt Holdings: An Empirical Analysis, September 2009, available at: <http://digitalcommons.ilr.cornell.edu/cr/1/> (finding evidence that outside investors expect that managers with large inside debt holdings will manage more conservatively).

portion of their subordinated debt holdings into the public markets periodically, would complement the twin goals of the bank's rolling debt issuance described earlier. Holding the bank's medium-term debt would encourage managers to adopt a medium- to long-term perspective in their decision making, and the periodic opportunity to sell would encourage managers' continuing vigilance regarding risk taking at the bank. In general, managers would be concerned about maintaining and increasing the trading price of the subdebt, which would discourage excessive risk taking.

D. Implementation

To this point, even a reader favorably disposed to my proposal may reasonably worry about how these banker bonding arrangements might be implemented. Dictating banker bonding would seem rather intrusive, given the private contractual nature of executive compensation arrangements.²⁹ Moreover, government mandates may be difficult to structure without falling prey to rent seeking interest groups, and they may be difficult to tailor to specific banks' conditions or to revise in the face of changed conditions. Calibrating the right mix of debt- and equity-based compensation might be tricky and may depend on bank-specific factors, including capitalization and investment opportunities.³⁰

Rather than mandates, a feasible approach that avoids many of the pitfalls of a mandatory approach would be to incorporate the risk-reducing features of bank officers' compensation arrangements in calibrating banks' deposit insurance premiums.³¹ This approach would incentivize but not mandate some form of banker bonding. Other incentive schemes may also be worth exploring.³²

²⁹ For banks receiving government bailout funds, of course, the government's intervention is conceptually much more easily justified. The current Financial Stability Plan already incorporates certain bank executive compensation requirements. Treasury Department, *Executive Compensation*, http://www.financialstability.gov/about/executive_compensation.html (last visited Aug. 27, 2009). See also *supra* note 2.

³⁰ See John et al., *supra* note 4, at 96 (noting that bank managers' risk-shifting incentives depend crucially on the characteristics of the bank's investment opportunities).

³¹ See *id.*

³² For example, some form of income tax incentive could also be useful. See *supra* note 21 and accompanying text.

IV. CONCLUSION

Market discipline may always be a useful adjunct to regulatory oversight. Happily, scholars and policy makers have already discussed the prospects for using publicly traded subordinated debt to discipline banks' risk taking. Contractual covenants directly constrain risk taking, and market pricing may signal excessive risk taking to both investors and regulators. As a practical matter, mandating subordinated debt issuance for the nation's largest banks effects no drastic regulatory burden, since most of the largest commercial banks and bank holding companies already issue subordinated debt.³³ For the purpose of containing systemic risk, the largest banks will be the most important.

I take the idea of bank subordinated debt a step further, borrowing from the pay-for-performance literature to suggest that subordinated debt be included in bank managers' compensation packages. As equity compensation is used to align managers' interests with those of shareholders, subordinated debt compensation could be used to align bank managers' interests with those of creditors and regulators. Admittedly, important details of this approach will need to be worked out through practical experience. In this time of critical regulatory re-examination and experimentation, however, bonding bankers to less risky strategies seems a worthy project.

³³ At the end of 1998, 45 of the 50 largest commercial banks and 48 of the largest 50 bank holding companies had issued subordinated debt. Lang & Robertson, *supra* note 28, at 124.

