

2-1-2009

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Recommended Citation

Schwarcz, Steven L., "Conflicts and Financial Collapse: The Problem of Secondary-Management Agency Costs" (2009). *Duke Law School Faculty Scholarship Series*. Paper 160.
http://lsr.nellco.org/duke_fs/160

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Conflicts and Financial Collapse: The Problem of Secondary-Management Agency Costs¹

Steven L. Schwarcz²

Abstract: Corporate governance scholarship has long focused on conflicts of interest between firms and their top executive officers. This essay contends that increasing leverage and financial complexity make it important for scholars to also focus on conflicts of interest between firms and their secondary managers.

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I. INTRODUCTION

I have recently argued that financial market failures can be attributed, in large part,³ to three causes: conflicts, complacency, and complexity.⁴ This essay engages the

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first cause, focusing on a subset of conflicts that in the past has been regarded as relatively harmless: conflicts between a firm and its middle- to lower-level management (hereinafter “secondary management” or “secondary managers”). The essay’s thesis is that, as financial markets and the securities traded therein become more complex and as firms become more highly leveraged, these conflicts are increasingly likely to trigger the collapse of firms that invest in those securities and possibly also of the markets themselves.

Corporate governance scholarship has long grappled with conflicts of interest between a firm (meaning its owners, typically shareholders) and the firm’s top managers, such as chief executive officers. Costs associated with this conflict are referred to as agency costs because managers are agents of the firm. It is widely acknowledged that top managers sometimes act to benefit themselves, to the detriment of the firm.⁵ To mitigate these agency costs, corporate governance scholars traditionally focus on two topics: (i) reducing top-management conflicts of interest, and (ii) improving board governance.⁶

³ Systemic financial market failures also can be attributed to a type of tragedy of the commons: because the benefits of exploiting finite capital resources accrue to individual market participants whereas the costs of exploitation, which affect the real economy, are distributed among an even wider class of persons, market participants have insufficient incentive to internalize their externalities. Therefore, even in a simple financial system with no conflicts and hyper-diligent market participants (that is, a financial system with none of the causes of failure indicated *infra* note 4 and accompanying text), systemic risk is theoretically possible. Steven L. Schwarcz, *Understanding the ‘Subprime’ Financial Crisis*, 60 S. C. L. REV. (forthcoming 2009), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1288687. For a general analysis of systemic risk, see Steven L. Schwarcz, *Systemic Risk*, 97 GEO. L.J. 193 (Nov. 2008).

⁴ Steven L. Schwarcz, *Protecting Financial Markets: Lessons from the Subprime Mortgage Meltdown*, 93 MINN. L. REV. 373 (2008). Running throughout these causes is a fourth cause, cupidity; but because greed is so ingrained in human nature and so intertwined with the other causes, it adds little insight to view it separately.

⁵ The classic text is ADOLF A. BERLE & GARDINER C. MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* (1932) (arguing that although shareholders rely on the board of directors to represent their interests, boards become so dominated by the management over time that their supervisory role becomes ineffective, especially where there is a collective action problem, i.e., the cost of supervision outweighs the benefits for small stakeholders). Subsequent scholars have extended these arguments to conflicts with top managers, such as CEOs. [cite]

⁶ [cite]

Scholars have largely ignored, however, conflicts of interest between a firm and its secondary managers.⁷ There appear to be several reasons for this oversight. Most obviously, secondary managers report to, and thus are already theoretically subject to control by, top managers. Moreover, to the extent decisions of secondary managers are not deemed to be pivotal to the direction of a firm or its strategic goals, the consequences of secondary management conflicts would not be deemed to be—and in the past probably were not—significant.

This essay contends that the increasing complexity of financial markets and of the securities traded therein makes secondary managers more likely to act in conflict with interests of their firms, and that the increasing financial leverage of firms in the modern credit economy exacerbates the consequences of these conflicted actions. The essay therefore argues for the importance of reducing secondary management conflicts of interest.

The essay's scope is limited to conflicts of interest between firms and secondary managers that could trigger the collapse of firms or financial markets.⁸ Secondary

⁷ A few scholars, though, have pointed out that current compensation schemes dissuade analysts from downgrading securities on a timely basis or from pricing securities correctly. *See, e.g.,* Roni Michaely & Kent L. Womack, *Conflict of Interest and the Credibility of Underwriter Analyst Recommendations*, 12 REV. FIN. STUD. 653, 654 (1999); H.D. Vinod, *Conflict of Interest Economics and Investment Analyst Biases*, 70 BROOK. L. REV. 53, 69, 72 (2004).

⁸ Thus, the essay does not examine conflicts of interest that are not between firms and secondary managers or that could not trigger the collapse of firms or financial markets. The former include conflicts in the originate-to-distribute model of loan origination, conflicts between servicers and investors, conflicts among investors that make servicers reluctant to exercise the discretionary judgment needed to restructure the underlying mortgage loans, and rating agency conflicts that might affect the reliability of their ratings. For an analysis of these types of conflicts, *see Protecting Financial Markets*, *supra* note 4, at 387-88, 392-93, & 400-01. The latter include cultural identity conflicts (*cf.* Regina F. Burch, *The Myth of the Unbiased Director*, 41 AKRON L. REV. 509 (2008)), conflicts in the ability of executives to contractually alter their legal duties to the firm (*cf.* Aaron D. Jones, *Corporate Officer Wrongdoing and the Fiduciary Duties of Corporate Officers under Delaware Law*, 44 AM. BUS. L.J. 475 (2007)), the particular sources of

managers likely to have that power include those who structure, sell, or invest in market securities on behalf of the firm, such as analysts responsible for making decisions about the firm's investments. Similarly, the types of firms likely to be seriously adversely affected by these conflicts include banks or other financial institutions whose assets are significantly invested in, or whose business is significantly concerned with structuring or selling, financial-market securities.⁹ This essay's examples will therefore concentrate on secondary managers who structure, sell, or invest in market securities on behalf of financial institutions. Nonetheless, portions of this essay might well have application to secondary managers in other types of firms.¹⁰

II. ANALYSIS

A. The Nature of the Conflict.

law that regulate conflicts (*cf.* Melvin Aron Eisenberg, *The Architecture of American Corporate Law: Facilitation and Regulation*, 2 BERKELEY BUS. L.J. 167 (2005)), or whether conflicts in the process for determining CEO pay falls short of the ideal of an arm's length negotiation and, if so, what should be done about it (*compare* Lucian Bebchuk & Jesse Fried, [cite] (arguing that boards should be made more responsive to shareholders by empowering shareholders to specifically approve certain "suspect" forms of compensation, to nominate directors, and to initiate changes to the corporate charter) with Lawton W. Hawkins, *Compensation Representatives: A Prudent Solution to Excessive CEO Pay*, 72 BROOKLYN L. REV. 449 (2007) (questioning whether CEO pay is in fact excessive, suggesting that CEOs may simply be using their legitimate bargaining power to command high pay, and arguing that large shareholders should appoint a "compensation representative" to the board to represent shareholder interests in negotiating executive pay)).

⁹ *Cf.* SEC. & EXCH. COMM'N, STAFF REPORT: ENHANCING DISCLOSURE IN THE MORTGAGE-BACKED SECURITIES MARKETS (2003),

<http://www.sec.gov/news/studies/mortgagebacked.htm> (reporting that investors in mortgage-backed and other securities are "overwhelmingly" financial institutions).

¹⁰ For example, if secondary-manager compensation of a large drug company is based on bringing new drugs to market, secondary managers would have an incentive to minimize reporting to senior management about a new drug's possible, latent long-term side effects—a scenario that has certain parallels to secondary managers of a large financial institution not fully reporting to senior management the long-term market risk exposure of a particular financial product. *Cf. infra* notes 12-15 and accompanying text (describing that latter scenario).

The conflict centers on compensation. Secondary managers are typically compensated for performing their assigned tasks, without regard to the long-term consequences of the tasks to their firms.¹¹ For example, secondary managers who structure, sell, or invest in market securities on behalf of a firm are customarily compensated for those tasks even if, ultimately, the structure proves inadequate or the securities turn out to be poor investments.¹²

This conflict can create perverse incentives. For example, as the VaR, or value-at-risk, model for measuring investment-portfolio risk became more accepted, financial firms began compensating secondary managers not only for generating profits but also for generating profits with low risks, as measured by VaR.¹³ Secondary managers therefore turned to investment products with low VaR risk profile, like credit-defaults swaps that generate small gains but only rarely have losses.¹⁴ The managers knew, but did not always explain to their seniors, that any losses that might eventually occur would be huge.¹⁵

¹¹ John C. Coffee, Jr., *Beyond the Shut-Eyed Sentry: Toward a Theoretical View of Corporate Misconduct and an Effective Legal Response*, 63 VA. L. REV. 1099, 1105 n.13 (1977); Flora Guidry et al., *Earnings-based Bonus Plans and Earnings Management by Business-unit Managers*, 26 J. ACCT. & ECON. 113, 113–15, 140 (1998). See also M.P. Narayanan, *Managerial Incentives for Short-Term Results*, 40 J. FIN. 1469, 1482–83 (1985) (explaining that managers may have incentives to pursue short-term gains).

¹² Liam Plevin & Susanne Craig, *Deal Fees Under Fire Amid Mortgage Crisis*, WALL ST. J. ONLINE, Jan. 18, 2008, http://www.realestatejournal.com/buysell/mortgages/20080118-plevin.html?mod=RSS_Real_Estate_Journal&rejrss=frontpage. Cf. Pierre Cailleteau, *Archaeology of the Crisis*, MOODY'S GLOBAL FIN. RISK PERSP., Jan. 2008, at 2 (observing that “it is not clear that existing compensation mechanisms effectively ensure that traders take into account the long-term interests of the bank for which they work”). A secondary manager who structures a deal for example, may be compensated based on the fee generated by that deal. [cite]

¹³ Joe Nocera, *Risk Mismanagement*, N.Y. TIMES, Jan. 4, 2009 (Sunday magazine), at 24, 26, & 46.

¹⁴ The VaR model typically excluded losses that have less than a one-percent (or, in some cases, five-percent) likelihood of occurring within the model's limited time frame. *Id.* at 46.

¹⁵ *Id.*

Why, then, are secondary managers typically compensated without regard to long-term consequences of their performance? One reason is that secondary managers are subject to supervision and management control by top managers,¹⁶ who in turn are subject to direction of the board of directors. Top managers therefore are supposedly responsible for ensuring, and thus monitoring, that the tasks performed by secondary managers take into account long-term consequences to the firm.¹⁷

The recent financial crisis has graphically demonstrated, though, that the conflict causes secondary managers to sometimes act in ways that create adverse long-term consequences to their firms, despite top management monitoring and supervision. The next part of this essay examines why.

B. Complexity Causes Overreliance on Signals, Making the Conflict Worse.

Why does monitoring and supervision by top management fail to prevent secondary managers from acting in conflict with their firms? I believe the answer is rooted in the increasing complexity of financial markets and of market securities,¹⁸ which causes overreliance on signals.¹⁹ Such overreliance, in turn, worsens the conflict, making

¹⁶ *Cf. supra* note 7 and following text (observing that this same rationale appears to explain why scholars have largely ignored conflicts of interest between a firm and its secondary managers).

¹⁷ Although top managers who themselves might have conflicts with the firm should not, in theory, be conflicted regarding their managerial obligations to restrain secondary-management conflicts, the conflicts sometimes could coincide. *See, e.g.*, E-mail from William W. Bratton, Peter P. Weidenbruch, Jr. Professor of Business Law, Georgetown University Law Center, to the author (Dec, 28, 2008, 2:49 PM EST) (on file with author) (contending that “[t]he [compensation] incentives [for secondary and top management] haven’t been much different in the recent [business] environment”).

¹⁸ For an analysis of this increasing complexity, *see* Steven L. Schwarcz, “Complexity as a Catalyst of Market Failure” Part II.B (“Complexities of Modern Investment Securities”) (work in progress, 2009).

¹⁹ *See infra* notes 21-22 and accompanying text (discussing overreliance on signals represented by rating-agency ratings and mathematical models).

secondary managers more likely to act on the conflict and also making it difficult for top managers to properly monitor secondary management action.²⁰

Complexity causes overreliance on signals. Consider first why complexity causes overreliance on signals. In the face of complexity, human beings often resort to simplifying heuristics.²¹ For example, even though different people mature at different ages, the age for alcohol consumption in the United States is fixed at twenty-one for everyone. The heuristics here, or the rule of thumb, is that by the age of twenty-one a person is able to responsibly consume alcohol. In the context of structuring, selling, or investing in complex market securities, these heuristics include the “signals” provided by rating-agency ratings and by mathematical models.²²

As the discussion below shows, such reliance—or “overreliance,” because the signal is an imperfect indicator of the underlying complexity—can worsen the conflict between a firm and its secondary managers by making such managers more likely to act in conflict with the firm and also by making it difficult for top managers to adequately monitor secondary management action.

Overreliance makes secondary managers more likely to act in conflict with their firms. Being compensated for performing specific tasks without regard to long-term

²⁰ I believe that overreliance on signals due to conflicts between a firm and its secondary managers can also explain failures of the recent financial crisis that have been attributable to other causes. For example, many commentators attribute the lowered investing standards to the originate-and-distribute model of mortgage loan origination. See Steven L. Schwarcz, *The Future of Securitization*, 41 CONN. L. REV., Issue No. 4 (forthcoming 2009 symposium issue on “The Subprime Crisis: Going Forward,” available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1300928), at ___. I believe, in contrast, that the same overreliance described above explains why firms invested in investment-grade rated mortgage-backed securities originated by others.

²¹ See, e.g., Anuj K. Shah & Daniel M. Oppenheimer, *Heuristics Made Easy: An Effort-Reduction Framework*, PSYCHOL. BULL., Mar., 2006, at 207 (explaining behavioral psychology experiment demonstrating when individuals employ heuristics). See also Cass Sunstein, *A Behavioral Analysis of Law*, 64 U. CHI. L. REV. 1175 (1997) (discussing biases and heuristics in the legal context).

²² See *infra* notes 24-26 and accompanying text.

consequences to the firm,²³ secondary managers are tempted to take a relatively short-term view when performing tasks. This temptation makes secondary managers especially susceptible to overrely on signals, particularly when the signals align their performance with their economic benefit.²⁴ Overreliance then makes those managers more likely to act in conflict with their firms.

In the recent financial crisis, for example, secondary managers overrelied on signals, in the form of rating-agency ratings and mathematical models, which aligned secondary-manager performance and economic benefit. Thus, “[a] lot of institutional investors bought [mortgage-backed] securities substantially based on their ratings [without fully understanding what they bought], in part because the market has become so complex.”²⁵ Similarly, there “was an enormous faith in the market’s ability to analyze and measure risk” through mathematical models.²⁶

That overreliance by secondary managers was clearly in conflict with the long-term interests of their firms. Although ratings provide a useful yardstick by which to compare the safety of a debt security, ratings are imperfect measures, not even taking into account the possibility of fraud.²⁷ In the recent financial crisis, many mortgage-backed securities turned out to be incorrectly rated.²⁸ Similarly, although mathematical models can bring insight and clarity if the model is realistic and the inputted data are reliable,

²³ See *supra* note 11-12.

²⁴ I am not claiming, nor do I necessarily believe, that most secondary managers fraudulently or even consciously will act contrary to their firm’s long-term interests.

²⁵ Aaron Lucchetti & Serena Ng, *Credit & Blame: How Rating Firms’ Calls Fueled Subprime Mess*, WALL ST. J., Aug. 15, 2007, at A10. For a discussion of rating agencies and their ratings, see Steven L. Schwarcz, *Private Ordering of Public Markets: The Rating Agency Paradox*, 2002 U. ILLINOIS L. REV. 1 (2002).

²⁶ Karl S. Okamoto, *After the Bailout: Regulating Systemic Moral Hazard* 23 (Oct. 30, 2008 unpublished draft manuscript, on file with author). See also *supra* notes 13-15 and accompanying text (discussing reliance on the VaR model).

²⁷ *Private Ordering of Public Markets*, *supra* note 25, at 6 (observing that rating agencies do not rate for fraud).

²⁸ See, e.g., 10th William Taylor Memorial Lecture, *Credit Markets and the Economic Crisis: Hearing Before the S. Comm. on Banking, Housing and Urban Affairs*, [cite] (Oct.

they can be misleading if the model is unrealistic or the inputted data are unreliable.²⁹ In the recent financial crisis, it was not only the VaR model that was misleading³⁰; the cash-flow models underlying many mortgage-backed securities also were misleading because they turned out to rely on incorrect assumptions and data.³¹

Overreliance makes it difficult for top managers to adequately monitor secondary management action. Overreliance also makes it difficult for top managers to adequately monitor secondary management action. In the face of complexity, top managers, like secondary managers, will be tempted to overrely on simplifying heuristics, like the signals provided by ratings and mathematical models. Although top managers will not be as susceptible as secondary managers to overrely due to conflicts, top managers will be susceptible to overrely for another reason: where the task being performed is highly technical, they will know less, and thus find the task more complex, than secondary managers.

Consider this essay's example of a secondary manager who structures, sells, or invests in complex market securities on behalf of his firm. This manager typically will have considerable technical training or experience regarding the securities.³² Yet even with that training and experience, he probably will not completely understand everything about those securities.³³ The top manager supervising him is likely to know even less, though. If, therefore, the secondary manager recommends that the firm invest in a given

16, 2008) (statement of Eugene Ludwig, Chief Executive Officer, Promontory Financial Group).

²⁹ *The Future of Securitization*, *supra* note 20, at ___.

³⁰ *See supra* notes 13-15 and accompanying text.

³¹ Statement of Eugene Ludwig, *supra* note 28 (observing that “it is widely accepted” now that these models relied on “insufficient data and faulty assumptions”).

³² For example, the Bureau of Labor and Statistics suggests that the minimum level of academic training for financial managers is a “bachelor’s degree in finance, accounting, economics or business administration.” BUREAU OF LAB. & STAT., OCCUPATIONAL OUTLOOK HANDBOOK 2 (2008–09 ed.), available at <http://www.bls.gov/oco/ocos010.pdf> (last visited Feb. 11, 2009).

³³ “Complexity as a Catalyst of Market Failure,” *supra* note 18, at ___.

amount of those securities rated investment grade,³⁴ the top manager will have little basis to veto that recommendation.³⁵ Similarly, top managers will probably have little expertise to go beyond VaR or other mathematically-modeled risk profiles.³⁶

The complexity of modern financial markets, and resulting overreliance on signals such as ratings and models, thus makes it difficult for top managers to adequately monitor secondary management action.

C. Financial Leverage Exacerbates Problems Caused by Overreliance.

This essay so far has demonstrated that the increasing complexity of financial markets and the securities traded therein makes secondary managers more likely to act in conflict with interests of their firms. I now show that the increasing financial leverage of firms in the modern credit economy exacerbates the consequences of these conflicts.

Increased financial leverage means that a firm will be less financially robust. Absent leverage, a firm “can absorb losses linearly, dollar for dollar.”³⁷ The less leverage, the less likely it is, other factors being equal, that a firm would fail to pay its debts as they mature.³⁸ When a firm is highly leveraged, though, losses beyond a certain level—depending on the firm’s size and leverage—will precipitously degrade its ability to pay its debts.³⁹ Therefore, if a highly-leveraged firm suffers significant losses because

³⁴ The term investment grade was originally used by various regulatory bodies in the United States to connote obligations eligible for investment by banks, insurance companies, and other financial institutions. Over time, this term gained widespread acceptance throughout the investment community. *Private Ordering of Public Markets*, *supra* note 25, at 7-8.

³⁵ This assumes, of course, that the interest rate on those securities is roughly commensurate with the investment grade rating.

³⁶ *Cf.* Nocera, *supra* note 13, at 46 (claiming that the VaR model obscured from senior managers the extent of potential future liability from CDS products).

³⁷ *Systemic Risk*, *supra* note 3, at 223.

³⁸ *Id.* at 224.

³⁹ *Id.*

of the conflict with its secondary managers—as happened to many financial institutions in the recent financial crisis⁴⁰—the firm may well default.⁴¹

The consequences of the conflict can go even further. Increasing leverage not only increases the risk that one firm's failure will systemically trigger failures of other highly-leveraged, and thus less financial robust, firms, but of markets themselves.⁴² This too occurred in the recent financial crisis. In part because of conflicts between financial institutions and their secondary managers, many financial institutions invested in substantial amounts of risky but investment-grade-rated mortgage-backed securities.⁴³ When some of these securities started defaulting or being downgraded because of defaults on underlying subprime mortgage loans, investors started losing confidence in ratings and avoiding debt securities as investments.⁴⁴ With fewer investors, the price of debt securities started falling, which in turn required firms using debt securities as collateral to mark them to market and put up cash.⁴⁵ Firms had to sell more securities to

⁴⁰ See Keith Darcy, *Banking on the American Dream*, FINANCIAL SERVICES TECHNOLOGY, Sept. 2008, available at <http://www.usfst.com/article/Issue-9/Risk-Management-AND-BCDR/Banking-on-the-American-Dream/> (discussing losses throughout the financial industry due to conflicts of interest); *Lehman Notes Investigation: Vernon Healy Law Firm Files First Arbitration Claim Against UBS on Behalf of Investor who Purchased Lehman Notes Sold by UBS*, BLOOMBERG, Jan. 27, 2009, <http://www.bloomberg.com/apps/news?pid=conewsstory&refer=conews&tkr=LEH%3AUS&sid=aYnLGv5JNrzk> (describing a filed arbitration claim asserting that a conflict of interest led UBS to recommend investments that led to large losses).

⁴¹ Lehman Brothers defaulted, for example, and was forced to declare bankruptcy. Andrew Ross Sorkin et al., *Lehman Files for Bankruptcy; Merrill is Sold*, N.Y. TIMES, Sept. 14, 2008, at [cite]. AIG likely would have defaulted without government intervention. Matthew Karnitschnig et al., *U.S. to Take Over AIG in \$85 Billion Bailout; Central Banks Inject Cash as Credit Dries Up*, WALL ST. J., Sept. 16, 2008, at [cite].

⁴² *Systemic Risk*, *supra* note 3, at 224.

⁴³ *Understanding the 'Subprime' Financial Crisis*, *supra* note 3, at ___. These conflicts between financial institutions and their secondary managers resembled those discussed *supra* notes 12-15 and accompanying text: secondary managers who knew that investments in these mortgage-backed securities were risky did not always explain the full extent of the risk to their seniors, who overrelied on the investment-grade ratings of the securities.

⁴⁴ *Understanding the 'Subprime' Financial Crisis*, *supra* note 3, at ___.

⁴⁵ *Id.*

raise the cash, causing market prices to plummet even further downward in a death spiral.⁴⁶ The collapse in market prices meant that banks and other financial institutions holding mortgage-backed securities had to write down their value, causing these highly-leveraged institutions to appear even more financially risky, in turn triggering concern over counterparty risk: parties were afraid these institutions might default on their contractual obligations and therefore stopped dealing with them.⁴⁷ As a result, the credit markets shut down, severely impacting the real economy.⁴⁸

D. Finding Solutions.

The analysis above has shown that conflicts of interest between firms and their secondary managers are no longer harmless. To the contrary, increasing leverage and financial complexity make these conflicts dangerous to both firms and financial markets. This essay next examines possible solutions.

Limiting conflicts. The most direct way to limit conflicts in our case is by aligning incentives. Because compensation is at the root of the conflict between firms and their secondary managers, the most effective way to align incentives is to tie secondary-manager compensation to long-term interests of the firm. This could be done in various ways.

For example, a firm might retroactively recover (“clawback”) compensation paid to secondary managers who have structured, sold, or invested in market securities on behalf of the firm if, within some time period, the structure proves inadequate or the securities turn out to be poor investments.⁴⁹ Similarly, a firm might pay a portion of a

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Cf.* Scott Harshbarger & Goutam U. Jois, *Looking Back and Looking Forward: Sarbanes-Oxley and the Future of Corporate Governance*, 40 AKRON L. REV. 1 (2007) (proposing that firms enact aggressive “clawback” provisions to keep CEOs accountable); Emergency Economic Stabilization Act of 2008 (“EESA”) § 111(b)(2)(A) (proposing clawback of compensation for a firm’s top five most-highly paid executives).

secondary manager's compensation contingently over time or in the form of equity securities with long-term lock-down constraints on selling the securities.⁵⁰ The amount of compensation subject to clawback or paid contingently or in equity must be material enough in context to affect secondary management incentives. In determining that amount, a firm will have to take into account, of course, how the deferred, contingent, or equity compensation will affect the firm's ability to compete for the best secondary managers. A firm also should consider timing. Too short a time frame may not sufficiently align long-term incentives, whereas too long a time frame may run into the "availability bias": individuals overestimate the importance of events that are imminent, such as receiving a portion of the compensation now, and underestimate events that are remote, such as contingently receiving compensation in the future.⁵¹

Any such alignment of compensation incentives with long-term interests of the firm would have to also address the compensation of top managers supervising the secondary managers. Although top management should be responsible for monitoring and ensuring that the tasks performed by secondary managers take into account long-term consequences to the firm,⁵² top managers themselves may have conflicts that induce them to ignore those long-term consequences.⁵³ For example, a top manager supervising a

This approach would not work if a secondary manager receives such large amounts of compensation that, even if a portion can be clawed back, the manager will be financially independent of the firm. It is unlikely, though not impossible, that secondary managers will receive such high compensation.

⁵⁰ E-mail from William W. Bratton, *supra* note 17 (suggesting paying secondary managers partly through equity; and observing that although long-term lock-downs on selling the equity would not have prevented the recent financial crisis, it "would have imported some risk aversion and so would not have hurt").

⁵¹ *See, e.g.,* John C. Coffee, Jr., *What Caused Enron, A Capsule Social and Economic History of the 1990s*, 89 CORNELL L. REV. 269, 294-95 (2004) (citing Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, in JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES (1982); Sunstein, *supra* note 21, at 1188 (observing that people tend to think that risks are more serious when an incident is readily called to mind or "available").

⁵² *See* text accompanying note 17, *supra*.

⁵³ *Cf.* note 17, *supra* (observing that although top managers who themselves might have conflicts with the firm should not, in theory, be conflicted regarding their managerial obligations to restrain secondary-management conflicts, the conflicts sometimes could

secondary manager may get paid based on the firm's (or a business group's) short-term profitability, which is materially driven by the secondary manager's work.⁵⁴ In these cases, top management compensation should also be aligned with the firm's long-term interests—at least insofar as top management conflicts could undermine monitoring of secondary management.⁵⁵

Another way a firm can align incentives is to announce a policy to terminate secondary managers who structure market securities that later prove inadequate or who sell or invest in market securities that later turn out to be poor investments. This approach, however, may not be as effective as aligning compensation incentives. Individuals overestimate the importance of imminent events, such as having a job and being paid a bonus, and underestimate events that are remote, such as the possibility of being fired at a future date.⁵⁶ Individuals in industries with high job turnover may even

coincide); Michael Lewis & David Einhorn, *The End of the Financial World As We Know It*, Op-Ed, N.Y. TIMES, Jan. 4, 2009, at WK 9 (discussing the “tyranny of the short term”).

⁵⁴ Former top AIG executives describe Joseph Cassano, the president of AIG-FP, the AIG affiliate that brought AIG down through its credit-default-swap trading, as a person who was making a fortune on those swaps and who resisted AIG audits. See Testimony of Robert Willumstad & Martin Sullivan before the U.S. House of Representatives Oversight and Government Reform Committee, PANEL II OF A HEARING OF THE HOUSE OVERSIGHT AND GOVERNMENT REFORM COMMITTEE ON THE CAUSE AND EFFECTS OF THE AIG BAILOUT (reported in Fed. News Service, October 7 (2008)).

⁵⁵ This essay does not engage the larger issue of how top manager compensation should be aligned with shareholder interests. For discussion of that issue, compare LUCIAN BEBCHUK & JESSE FRIED, *PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION* (2004) (arguing that top managers can use existing governance structures to obtain excessively high incentive pay, and that shareholders should be empowered to prevent this) with Michael C. Jensen & Kevin J. Murphy, *Performance Pay and Top-Management Incentives*, 98 J. POL. ECON. 225 (1990) (arguing for equity-based compensation of top management). See also Stephen M. Bainbridge, Book Review Essay, *Executive Compensation: Who Decides?*, 83 TEX. L. REV. 1615 (2005) (reviewing this controversy); William W. Bratton, Book Review, *The Academic Tournament Over Executive Compensation*, 93 CAL. L. REV. 1557 (2005) (same).

⁵⁶ Cf. *supra* note 51 (discussing how individuals view different time horizons).

expect to be at different jobs before the success of an investment is likely to be known.⁵⁷ Furthermore, secondary managers may feel, and in fact be, secure from being fired if many similarly situated secondary managers are acting the same way.⁵⁸ In the recent financial crisis, for example, secondary managers often recommended investments in highly complex mortgage-backed securities they did not fully understand,⁵⁹ apparently feeling safe in following the herd.

Conflicts also can be limited by better monitoring.⁶⁰ This might include better monitoring by top management.⁶¹ It also might include, for example, hiring technically trained “control” officers who do not have conflicts to supervise relevant aspects of the quality of tasks performed by secondary managers.⁶² This could be very expensive, though, because any control officer so hired would face the prospect of losing expertise over time.⁶³

⁵⁷ Steven L. Schwarcz, *Rethinking the Disclosure Paradigm in a World of Complexity*, 2004 U. ILL. L. REV. 1, 14 (observing that analysts who have jobs with limited time horizons may have low accountability).

⁵⁸ Cf. *Rethinking the Disclosure Paradigm*, *supra* note 57, at 14 (discussing findings by Professors Paul M. Healy and Krishna Palepu that investment-fund managers who, believing a stock is overvalued, nonetheless follow the crowd will not be blamed if the stock ultimately crashes).

⁵⁹ *Understanding the ‘Subprime’ Financial Crisis*, *supra* note 3, at ___.

⁶⁰ Cf. Kimberly D. Krawiec, *The Return of the Rogue*, 50 ARIZ. L. REV. 879, 879-80 (2008) (observing that the “debilitating losses at many financial institutions in the wake of the current credit crisis [partly have been blamed] on lax internal controls and oversight”).

⁶¹ See *supra* notes 51-55 and accompanying text.

⁶² This type of supervision is very common in accounting firms, for example. See, e.g., Lawrence A. Poneman, *Serving Two Masters, it Still Can’t be Done*, C.P.A. J., Aug. 1996, available at <http://www.nysscpa.org/cpajournal/1996/0896/public82f96.htm> (discussing the need for internal controls, including “adequate supervision” and review of work,” to address conflicts within accounting firms).

⁶³ *Rethinking the Disclosure Paradigm*, *supra* note 57, at 14-15 (observing that even a technically-trained analyst will lose expertise over time if no longer employed doing market deals). Based on his experience as a former law-firm partner, the author observes, albeit as an imperfect analogy, that the most highly-respected partners of law firms typically serve from time to time on an opinions committee to monitor their peer partners when giving legal opinions on behalf of the firm—perhaps a firm’s most sensitive area of exposure to liability. See generally Steven L. Schwarcz, *The Limits of Lawyering: Legal Opinions in Structured Finance*, 84 TEX. L. REV. 1, 9-14 (2005) (describing legal

Improving the accuracy of signals. Yet another way to help mitigate the conflict of interest between a firm and its secondary managers might be to try to improve the accuracy of signals, such as improving the accuracy of rating-agency ratings or risk models. The viability of this type of approach would be highly fact dependent.

This approach also might have unintended consequences. If the accuracy of a signal is not improved as much as the perception of the signal's accuracy, overreliance may actually increase. For example, if ratings are perceived to be highly accurate and no longer subject to exceptions (like fraud), secondary managers will rely even more on ratings. But if the accuracy of ratings has not increased commensurately to the perception, they will be overrelying.⁶⁴ Remember that the widespread acceptance of the VaR model for assessing risk contributed to management overreliance.⁶⁵

Should solutions be market-driven or regulatory? It therefore appears that the most effective way to address the conflict between firms and their secondary managers is to align secondary management compensation incentives with the long-term interests of the firm. To what extent should this be left to the market, and to what extent should it be imposed by regulation?

opinions). Because partners on opinions committees usually devote only a small portion of their time to that task, their transactional expertise is not generally impaired. This raises the question whether highly-respected secondary managers of financial firms might serve the same type of function, at least for selected secondary-management decisions. One important distinction, though, is that law-firm partners—who have made substantial investments in their firms and who may well be personally responsible, if the firm fails, for firm liabilities such as rent and bank debt—are likely to be much more concerned than secondary managers about their firm's viability. To some extent, perhaps, this distinction might be partially bridged by specially compensating secondary managers of corporations who serve in this capacity.

⁶⁴ In this context, query the extent to which ratings that are perceived as imperfect create incentives for investor monitoring. Cf. Lucian Arye Bebchuk & Jesse M. Fried, 105 YALE L.J. 857, 902–03 (1996) (explaining that a secured creditor with full priority has less incentive to monitor the borrower's behavior).

⁶⁵ Nocera, *supra* note 13, at 46 (discussing management overreliance on VaR).

Firms clearly are in a better position than government regulators to determine how best to align secondary management compensation incentives with their long-term interests.⁶⁶ Furthermore, firms will want to align those incentives for their own long-term survival.⁶⁷ There may, however, be a collective-action problem that individual firms will be unable to solve: any firm that employs a deferred or contingent (or equity) compensation scheme will be disadvantaged in its ability to compete for the best secondary managers.⁶⁸ Government action may well be needed to help resolve this collective-action problem.

The question of whether these solutions should be market-driven or regulatory can also be viewed more broadly as a subset of the debate over regulating operational risk. Operational risk is term used to describe, among other things, the risk of loss resulting from inadequate or failed internal processes, people, and systems⁶⁹—and thus it would encompass the secondary-management conflicts discussed in this essay.

Many observers believe that enforced self-regulation is the best way to handle operational risk.⁷⁰ But others argue that the answer is more nuanced. Professor Krawiec, for example, contends that for low-frequency, high-impact events, enforced self-regulation of operational risk is worse than no regulation at all because it lures parties into a false sense of confidence while costing money.⁷¹

⁶⁶ Consider which constituents of a firm would be motivated to impose these solutions. Shareholders and creditors are the parties whose interests in a firm would be primarily affected by its collapse. *Cf.* 11 U.S.C. §§ 726(a) & 1129(a)(7)-(a)(8) (taking into account only holders of “claims” (creditors) and holders of “interests” (shareholders) in the bankruptcy process, although a firm’s collapse can indirectly affect an even wider “community of interests”). They therefore would be the parties with the greatest incentive to impose solutions—by shareholders presumably through the types of directors elected and any organizational restrictions placed on management, and by creditors through covenants.

⁶⁷ *Cf.* Krawiec, *The Return of the Rogue*, *supra* note 60, at 882 (observing that “Financial institutions . . . have some incentive to control operational risk for their own survival”).

⁶⁸ *See supra* note 51.

⁶⁹ Krawiec, *The Return of the Rogue*, *supra* note 60, at 880, 884.

⁷⁰ *See id.* at 880 (and sources cited therein).

⁷¹ *Id.* at 881, 883.

Although this debate provides an interesting way to frame the regulatory question, it is far from determinative. Risks arising from the conflict between a firm and its secondary managers are difficult to categorize as either low-frequency, high-impact—for which self regulation is arguably inappropriate—or high-frequency, low-impact—for which self regulation may well be more appropriate.

A final question is whether regulation, if adopted, should apply to all firms, including the large, sophisticated firms that, under the federal securities laws in the United States, are characterized as qualified institutional buyers (“QIBs”).⁷² The securities laws generally assume that QIBs can and will protect their own interests—or at least their own investments.⁷³ Anomalously, though, QIBs “are the very investors who lost the most money in the [recent] financial crisis,” much of it through bad investing.⁷⁴ Any exclusion of QIBs from regulation would first have to explain that anomaly.⁷⁵ Furthermore, because QIBs would be as subject to the collective-action problem as any other firms,⁷⁶ any regulation addressing that problem should equally apply to them.

III. CONCLUSIONS

⁷² QIBs are firms having more than \$100 million in the aggregate owned and invested in securities on a discretionary basis (or \$10 million in securities with respect to dealers). 17 C.F.R. § 230.144A (2000).

⁷³ *Id.*

⁷⁴ *See, e.g.*, Jenny Anderson, *Wall St. Banks Confront a String of Write-Downs*, N.Y. TIMES, Feb. 19, 2008, at C1 (reporting that “major banks . . . have already written off more than \$120 billion of losses stemming from bad mortgage-related investments”); Randall Smith, *Merrill’s \$5 Billion Bath Bares Deeper Divide—After Big Write-Down Tied to Mortgage Debt, O’Neal Asserts Control*, WALL ST. J., Oct. 6, 2007, at A1 (reporting a total of \$20 billion in write-downs by large investment banks).

⁷⁵ Consider, for example, to what extent, if any, this anomaly reflects the tragedy of the commons inherent in systemic risk). *See supra* note 3.

⁷⁶ *See supra* notes 67-68 and accompanying text (discussing the collective-action problem).

This essay focuses on rising agency costs associated with increasing complexity of financial markets and the securities traded therein and increasing leverage of firms in the modern credit economy. Increasing complexity makes it more likely that secondary managers will act in conflict with interests of their firms. Increasing leverage amplifies returns but, because it makes firms more susceptible to default, it also heightens the risk for losses from these conflicts. Scholars generally disregarded these conflicts in the traditional non-credit economy because the associated agency costs were relatively small.⁷⁷ In a highly-leveraged firm, these agency costs can be large. Indeed, in the recent financial crisis, they contributed to the failure of financial institutions and the collapse of financial markets, resulting in massive losses. Conflict-of-interest oversight of secondary managers thus matters much more today than it did in the past.

The essay argues that the most effective way to address the conflict is to align secondary management compensation incentives with the long-term interests of the firm. Firms have incentives, and are in a better position than government regulators, to determine how best to achieve this alignment. Regulation may well be needed, though, to help resolve the collective-action problem that individual firms that attempt to align incentives will be disadvantaged in their ability to compete for the best secondary managers.⁷⁸

⁷⁷ See *supra* note 7 and accompanying text. *But cf.* note 10, *supra* (observing that secondary-management conflicts could have significant consequences even in the traditional non-credit economy).

⁷⁸ This essay is normative and does not engage the question of whether secondary managers whose conflicted decisions ultimately led to losses in the recent financial crisis, or top managers supervising those secondary managers, should be liable under existing law for such losses. Any resolution to that question would have to take into account, among other things, such matters as causation and foreseeability. It seems unlikely, however, that one reasonably could foresee the sequence of events described in the text accompanying notes 43-48, *supra*.