Introduction

Almost everyone cares about the manner by which public company managers are paid. In one way or another, most observers of the business world have adopted the position advocated by Michael Jensen and Kevin Murphy over 20 years ago that it is more important how firms pay managers than how much they pay them. What had certainly been an active field before the recent financial crisis has become a frenzied area of research and theorizing thereafter. Although there are a handful of exceptions, corporate law scholars

1 See Michael C. Jensen & Kevin J. Murphy, CEO Incentives – It’s Not How Much You Pay, but How, 3 HARV. BUS. REV. 138 (May-June 1990).

and corporate governance activists continue to pay structuring decisions as a means of changing manager behavior — either by mitigating agency costs\(^3\) or, more recently, reducing excessive risk-taking.\(^4\) The case for pay structure’s effect on those behaviors has weakened of late in light of increased and independent pressure to maximize shareholder value.\(^5\) Yet the intense demand for more and more performance-based pay has continued unabated. The question naturally arises: Is the entire project misguided?\(^6\)

Ultimately, the answer might very well be “yes.” But before reaching that conclusion it is worth noting that changing managerial incentives is only one goal that might be achieved through concentrating on executive pay structure. This Article introduces, evaluates and ultimately expresses substantial skepticism about another potential benefit of closely observing pay structure: its capacity to signal information about firm value to capital markets. It is well known that incomplete disclosure under securities law implies a gap between a firm’s share price and its fundamental value.\(^7\) Additional credible signals about

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\(^{4}\) See, e.g., supra note 3.

\(^{5}\) See, e.g., Stulz & Fahlenbrach, supra note 3 at 1. For a more detailed discussion of the small effect of incentive pay on manager behavior, see Andrew C.W. Lund & Gregg D. Polsky, The Diminishing Returns of Incentive Pay in Executive Compensation Contracts, NOTRE DAME L. Rev. (forthcoming 2011).

\(^{6}\) See Lund & Polsky, supra note 3 at 3 (offering reasons why the focus on performance-based pay might remain even after its economic justification is diminished).

\(^{7}\) Other factors may also cause this systematic deviation. For example [Bratton & Wachter]. For purposes of this Article, however, I adopt a reasonably robust version of the semi-strong version of the Efficient Capital Markets Hypothesis. As will become clear, this
firm quality,\(^8\) insofar as they make disclosure more complete, should lead to more accurate share prices and a more efficient allocation of capital across the economy. If pay structure were well-positioned to provide such information, it could remain important even discounting any potential it might have for reducing agency costs. Moreover, as a positive matter, such a comparative advantage would provide a more satisfying explanation for the resilience of the incentive pay orthodoxy we observe, particularly among investors.

This Article offers two alternative theories for how pay structure (proportions of fixed and contingent pay, vesting conditions, holding periods, etc…) could function as a market signal. First, pay structure may signal to the markets something about the quality of firm governance (“Compensation-as-Governance”). In its simplified form, this is merely a restatement of the agency cost story mentioned above. Appropriately structured executive pay, i.e., highly performance-sensitive executive pay, might create incentives and thereby mitigates future governance problems. Pay structure, when disclosed, could signal to the market something about the governance discount it should apply when valuing the firm. As noted, this explanation has almost complete overlap with the traditional story,\(^9\) although the benefit enjoyed by virtue of paying attention to pay structure is realized both at the firm level through agency cost reduction and at the social level through more efficient capital allocation.

Skepticism about the agency-cost-mitigation story leads this simplified version of Compensation-as-Governance to fall apart. Just as agency costs are not necessarily mitigated or exacerbated by pay structure, pay structure cannot necessarily predict managerial behavior. Nevertheless, a more nuanced version of Compensation-as-Governance might be at work. Taking for granted that shareholders prefer particular pay structures to others even if that preference is periodically misguided, adoption of shareholder-preferred structures may simply show that the firm is responsive to shareholder pressure. If

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\(^8\) In contemporary work, Manuel Utset has offered a similar explanation for pay decisions based on signaling concerns. See ●, Manuel Utset (on file with the author). Utset’s main argument is that boards have little incentive to adjust CEO pay downward once they determine him or her to be less talented because doing so signals that same information to the market. This is an important argument serves as a plausible explanation for the observed increases in CEO pay over the past decades. This article differs in focus, however, as it seeks to understand why so many people might care so deeply about pay structure, even when they are explicitly agnostic over pay level. See, e.g., Bebchuk & Fried, supra note ● at ● (noting that an increase in pay/performance sensitivity will likely raise compensation levels).

\(^9\) It differs in the sense that insiders might have special knowledge that the pay-related incentives are inconsequential. Their adoption of high levels of incentive pay would thus be entirely directed at signaling to an ignorant audience who believes the incentives matter.
responsiveness to shareholders is correlated with future performance, the signal sent by pay structure obeisance may be meaningful.

Apart from Compensation-as-Governance, observed pay structure could provide an even more concrete signal about firm prospects. A manager expecting positive firm performance based on material non-public information should be more likely to accept high levels of incentive pay than one expecting neutral or negative performance, all else being equal. A revealed willingness to accept an incentive-pay-intensive package may therefore serve as a trading signal by the manager. In this way, “Compensation-as-Trading” could serve to disseminate inside information to markets more quickly than it otherwise would be.

The legitimacy and meaningfulness of each signal type vary. Compensation-as-Trading, proxying as it does for inside information, requires only that the manager’s choices provide a reliable report of that inside information. But executives may suffer from biases that make them less credible reporters of inside information via their compensation choice. Moreover, observed pay structures are likely to be determined by exogenously or, at the very least, difficult to evaluate against external influence.

Compensation-as-Governance does not suffer from that legitimacy concern, although it has its own problems. Because the market does not currently make many demands on firms regarding pay level, firms are able to largely avoid making difficult decisions about pay structure. With the test thus rendered too easy, pay structures naturally coalesce along the lines of market expectations making all signals less credible. Beyond that concern, there remain questions regarding the correlation between compensation governance and governance generally and, ultimately, firm performance.

Because of these flaws, pay structure can provide important signals about firm quality in only a small number of cases. Compensation-as-Governance may serve to differentiate the infinitesimal number of firms who signal poor governance through deviant pay design. Compensation-as-Trading might also provide benefits in a very particular context – negotiated sales of control where incumbent management’s negotiations over their own pay structure will

10 For reasons why all else may not be equal, see supra notes and accompanying text.
11 The signal occurs via decoding by outside observers of insiders’ “trades,” in this case trading one form of pay for another. The term “trade decoding” was most prominently used in Ronald J. Gilson & Reinier H. Kraakman, The Mechanisms of Market Efficiency, 70 VA. L. REV. 549, 573 (1984).
12 See infra notes and accompanying text.
more clearly reveal information about firm quality to potential purchasers. But, even taken together, these two instances seem hardly significant enough to justify the current attention paid to pay structure or the accompanying orthodoxy in favor of high levels of performance-based pay. This Article therefore helps confirm the conclusion that the received wisdom regarding executive compensation pay structure at public companies is largely wrongheaded.

Part I briefly describes the traditional agency-cost-related rationale for focusing on executive pay structure and shows that it no longer provides a convincing basis for caring about how we pay managers. It then discusses the importance of allocative efficiency and the role disclosure is thought to provide in achieving it. It describes how pay structure, subject as it is to extensive disclosure requirements, may be uniquely well-positioned to be incorporated into the total mix of information regarding any public company.

Parts II and III describe the alternative ways in which information about pay structure might signal something to markets about firm quality. Part II characterizes the focus on pay structure as one related to a firm governance signal, or Compensation-as-Governance. Of course, even this revised argument turns out to be weak if pay structure no longer holds much predictive capacity about managerial behavior. This Part then offers and critiques a more sophisticated version of pay structure as governance signal – pay structure decisions offer a regular and highly salient test of board responsiveness to shareholder demands.

Part III introduces the alternative possibility that observed pay structures could signal positive or negative non-public information to outsiders, or Compensation-as-Trading. It likens this signal to the oft-noted potential of insider trading to move security prices to more accurate levels and notes that Compensation-as-Trading is superior to insider trading in some respects. It subsequently critiques Compensation-as-Trading and finds it too to be lacking in justificatory strength. Part IV concludes.

I. AGENCY COSTS, SUBSTITUTION EFFECTS, AND THE PROMISE OF SIGNALING

The debates over executive compensation in both finance and law journals and the popular press tend to focus on either distributive grounds or intrafirm

13 This may help explain the prevalence of incentive pay in target companies after they are purchased by outsiders. See, e.g., Robert Jackson, Private Equity and Executive Compensation, 10-11 (on file with author); see also infra notes ●.
14 See Lund & Polsky, supra note ● at ●.
15 See [TSC Industries v. Northway]
efficiency grounds, with the discussion among academics heavily concentrated on the latter.\textsuperscript{16} Thus, the most prominent treatments of executive compensation in the finance and law canons largely concern themselves with the extent to which pay structure can minimize or, in the alternative, reflect agency costs arising from the separation of residual claim ownership from corporate control.\textsuperscript{17} More recently, the inquiry has shifted to the way in which pay structure can be used to prevent excessive risk-taking in the financial industry.\textsuperscript{18}

By “pay structure”, I mean the proportion of contingent, incentive pay relative to fixed pay and its design features. Today, executives receive their compensation in many ways. They receive salaries, deferred compensation (including pensions and other retirement benefits) and perquisites. More than ever before, executives receive a large portion of their pay in contingent, incentive-based form. This may include performance-based cash bonuses, but the largest portion of incentive pay, and thus one of the largest portions of overall pay, comes in the form of equity awards: restricted stock and stock options. Pay structure refers to both the proportion of these types of awards to fixed compensation devices and the specific terms of these awards, including performance triggers, vesting conditions, holding periods and proportion of the various flavors of contingent pay. It is distinguishable from total pay level which, although capable of having incentive-related effects, is generally excluded from the debate.\textsuperscript{19}

As discussed below, there are good reasons to think that pay structure’s potential to mitigate marginal agency costs or affect risk-taking at public firms is now overstated. Of course, maximizing firm value is not everything, even in corporate law. In fact, one of the most significant goals of corporate law – taking the network of state corporate law, federal securities law and quasi-governmental regulations together – has little to do with maximizing any particular firm’s value. Making capital markets more efficient is independently valuable as a regulatory achievement aside from efforts to reduce managerial slack, though the two may coincide.\textsuperscript{20} Thus, even if a governance device fails to significantly affect firm value, it could nevertheless have the salutary effect of allowing markets to more accurately measure that value. Moreover, there are plenty of reasons to think that pay structure might be well situated to serve that function given its informal and regulatory salience.

\textsuperscript{16} For more on the popular debate based on distributive concerns, see \textbullet.
\textsuperscript{17} See, e.g., [supra note \textbullet and others].
\textsuperscript{18} See supra note \textbullet.
\textsuperscript{19} See, e.g., Bebchuk & Fried, supra note \textbullet at \textbullet.
\textsuperscript{20} Most obviously, the two are related insofar as more efficient capital markets may tighten managerial slack. See, e.g., \textbullet.
A. The Traditional Case for Caring About Pay Structure

How sensitive to compensation structure is manager behavior at public firms? The dominant answer in the finance literature over the past three decades has been “very.” The drive for higher and higher levels of incentive pay originated there as researchers theorized that risk- and effort-averse managers would systematically fail to maximize firm value if their pay was distributed via a fixed wage. Incentive pay could serve as a linear disciplinary device not subject to the gaps in enforcement that plague alternatives like proxy fights, fiduciary duty suits and the market for corporate control. “How firms pay” is now widely believed to be one of if not the most important drivers of managerial performance.

To be clear about the incentives in question, neither inducing more effort nor preventing misappropriation was ever really on the table as a serious goal of increasing the proportion of incentive pay. Instead, incentive pay has been thought to work its magic where it is relatively difficult to observe managers’ behavior, where shareholders do not have the skills or motivations necessary to determine the proper cause of action, and where executive decisions affect firm percentage returns rather than dollar returns. In those cases, appropriate pay structure is thought to be the best device for preventing mass defection from shareholder value maximization.

21 See, e.g., Jensen and Murphy. For a primer on the theoretical case for incentive pay, see ●.

22 Regarding misappropriation, see Lund & Polsky, supra note ● at ●. Regarding effort, see e.g., Kevin J. Murphy, ● at 28 (“Although the CEO’s ‘action space’ is typically defined as unidimensional effort, it is widely acknowledged that the fundamental shareholder-manager agency problem is not getting the CEO to work harder, but rather getting him to choose actions that increase rather than decrease shareholder value.”).

23 For more on the question of observability, see Bengt Holmstrom, Moral Hazard and Observability, 10 BELL J. ECON. 74 (1979) (introducing his “informativeness principle”).

24 See Murphy, supra note ● at 28 (“In general, increasing shareholder wealth involves investing in positive net present value projects, increasing profits on existing capital, and diverting resources from negative net present value projects. There is a wide array of actions that affect shareholder value, including defining the business strategy, choosing between debt and equity financing, making dividend and repurchase decisions, identifying acquisition and divestiture targets, selecting industries and markets to enter or exit, allocating capital across business units, setting budgets for developing new products and businesses, hiring productive (and firing unproductive) subordinates, and designing, implementing, and maintaining the nexus of implicit and explicit contracts that defines the organization. Expanding the set of potential actions that affect shareholder value diminishes the role for ‘informativeness’ and increases the benefit of tying pay to the principal’s objective rather than to measures of inputs.”)

25 See George Baker & Brian Hall, ● at 1669.
The theory, however, has not kept up with the times and what may have been true in 1990 is not necessarily true today. In particular, alternative mechanisms that discipline managers have become stronger over time, making it more difficult for CEOs to make decisions that systematically deviate from share price maximization. Institutional shareholders have become even more significant players, with a majority of shares of NYSE firms now held by institutions. And of those institutions, ownership is concentrated more and more in the hands of mutual funds and hedge funds, which have proven to be more adept at shareholder activism. Proxy advisory firms have gained clout, making monitoring of firms even cheaper for large investors. As shareholders have gained power, boards have become more likely to exercise the power that they already held. Corporate governance committees have become nearly universal, and succession committees more prevalent. The committees that do exist meet more often, and boards are more likely to have formalized the CEO evaluation process. Directors have become less apt to serve as assistant managers and more apt to intensely monitor executives, at least in terms of share price management.

The changes have most transparently manifested themselves in an increasingly volatile managerial labor market at public companies. The managerial labor market has long been viewed with skepticism, at least in terms of the level of discipline that it was capable of meting out to managers. Recently, however, the market has become more penal. Since 1998, CEOs

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26 See Marcel Kahan & Edward Rock, Embattled CEOs, • TEX. L. REV. •, • (2010). [Bratton and Wachter]
27 See id. at 998; see also Paul Rose, Common Agency and the Public Corporation, 63 VAND. L. REV. 1355, 1356 (2010).
28 See Kahan & Rock, supra note • at 998-1004
29 Id. at 1005-07. For an example of the way in which proxy advisory firms wield influence over governance questions, see Andrew C.W. Lund, Say on Pay's Bundling Problems, 99 KENTUCKY L. J. 119 (2010).
30 Kahan & Rock, supra note • at 1027.
31 Id.
32 Id. at 1029.
33 Id.
34 See, e.g., Core, et al., supra note 8 at 9, n. 2 (ignoring, for incentive purposes, the threat of termination, but noting that “[t]his assumption likely does not hold for CEOs with large turnover probabilities”). Research performed at the end of the last century largely confirmed this view. See Kevin J. Murphy & Jan Zabojnik, Managerial Capital and the Market for CEO: 28-30, (2004) available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=984376 (finding that “departure probabilities for CEOs realizing returns 30% below the industry average were increased by 0.4% in the 1970s, 0.7% in the 1980s and 0.4% in the 1990s” and concluding that the turnover-performance relation … has fallen since the 1980s”); Murphy, supra note 9 at 47 (finding a 7.9% probability of departure for young CEOs at average-performing firms increasing only to an 8.5% probability if the young CEO’s firm realizes returns 30% below industry average).
turn over at a rate of 17.4% annually, making the average tenure of a CEO less than six years.\textsuperscript{35} As importantly, CEO terminations have increased in ways that force CEOs – or at least the subset with career concerns – to focus on share price.\textsuperscript{36} The labor market and incentive pay thus overlap to the extent that both are triggered by share price fluctuations.\textsuperscript{37}

In fact, CEO terminations have become more significantly related to share price performance, as measured by industry-adjusted firm performance, industry-wide performance and/or market-wide performance.\textsuperscript{38} Although that relationship is strong, it is relatively stronger in those cases where firm performance falters relative to its peers.\textsuperscript{39} For instance, the failure of boards to filter industry- or market-wide effects when making the termination decision is larger when the firm underperforms relative to its industry.\textsuperscript{40} On the other hand, boards are able to filter out exogenous shocks as long as the firm outperforms industry.\textsuperscript{41} This limited arbitrariness provides significant incentives to CEOs at firms where below-median industry-adjusted performance is a possibility. These incentives are largely the same as those thought to be provided by incentive pay. And while there may be a threshold level of underperformance needed to be reached prior to triggering labor

\textsuperscript{35} See Steven N. Kaplan & Bernadette A. Minton, \textit{How Has CEO Turnover Changed?}, 2, available at \url{http://faculty.chicagobooth.edu/steven.kaplan/research/km.pdf}. This conclusion is consistent with the results of a recent study, which found that as of April 2010 the typical CEO of an S&P 500 firm had served for only 6.6 years. See Joann S. Lublin, \textit{CEO Tenure, Stock Gains Often Go Hand-in-Hand}, \textit{Wall St. J.}, July 6, 2010, available at \url{http://online.wsj.com/article/SB100014240527487039000045755325172681419254.html?mod=rss_whats_news_us_business}. In addition, the Wall Street Journal study found that only 28 CEOs of the 500 S&P firms had served for more than 15 years, suggesting that the archetypal entrenched CEO has become a myth.

\textsuperscript{36} See Kahan & Rock, \textit{supra} note 1 at 1040 (“[I]f a CEO makes mistakes (or perhaps just has bad luck), both shareholders and directors will voice their criticism sooner and more strongly and in the days of yore, be it informally, through … a board-induced CEO resignation….. Moreover, since independent directors and even activist shareholders have limited capacity to micro-manage a company, it is likely that CEOs still have substantial decision-making power over most non-strategic business matters, \textit{as long as their decisions produce acceptable results}.” (emphasis added)); Cf. Of CEOs and Congressmen, \textit{Wall Street Journal}, A-14 (August 10, 2010) (“If CEOs were ever given the benefit of the doubt,… those days are over. A single misjudgment, personal or strategic, can cost a corporate boss his job.”).\textsuperscript{37}

\textsuperscript{37} See Lund & Polsky, \textit{supra} note 1 at 1 (summarizing findings that incentive pay payouts are a function of share price).

\textsuperscript{38} See Dirk Jenter & Fadi Kanaan, \textit{CEO Turnover and Relative Performance Evaluation}, 20-24, available at \url{http://papers.ssrn.com/sol3/papers.cfm?abstract_id=885531}. The Wall Street Journal study, see \textit{supra} note 1, similarly found that, of the 28 long-serving CEOs, 25 had led firms whose share price performance had beaten the overall S&P index over the term of their tenure.

\textsuperscript{39} See Jenter & Kanaan, \textit{supra} note 63 at 20-24.

\textsuperscript{40} Id. at 29.

\textsuperscript{41} Id. See Lund & Polsky, \textit{supra} note 1 at 1 for more on this data and its implications.
market discipline, it is hard to imagine CEOs with career concerns exploiting that slack given the trend lines and the qualified arbitrariness of the labor market.

The fact of managerial labor market pressure also limits the impact that pay structure can have on risk-taking decisions. First, it is hard to see that relevant decision-makers share the same view about what constitutes excessive risk-taking. Though there may be social costs of excessive risk-taking by any firm, those costs are usually not fully borne by shareholders who benefit from higher levels of risk. Yet, other than the highly regulated bank context, it is not clear how changes to compensation design can be accomplished without shareholder approval making pay structure reform difficult to achieve.

Second, even assuming that pay structures were altered to encourage less risk-taking, the newly intense pressures on CEO behavior would remain. Incentive pay programs might create longer equity horizons or shift the focus from equity to debt securities, but nothing would seem to shift the managerial labor market’s focus from short-term share price fluctuations. Of course some managers might place a higher value on their incentive pay awards than career concerns and other costs of having a share price that performs poorly in the short term, but there does seem to be good reason to be skeptical of pay structure reform as a panacea for problems of excessive risk-taking. If pay structure is to have serious relevance, then, either the pendulum must swing back towards a less penal world for public company CEOs or else it must be justified by something else.

42 See, e.g., Jenter & Kanaan, supra note 63 at 3 (citing research to the effect that CEO quality must fall below a threshold before a board will dismiss a manager). There may be other factors entering into the calculus as well. Coates and Kraakman, for example, demonstrate that CEO tenure has something of a term structure with respect to resignations and replacements via takeover (but not internal forced departures) for CEOs with low share holdings wherein the CEOs are relatively insulated for the first three to four years of their tenure, followed by a period of increased turnover, culminating in a period of lower turnover (perhaps demonstrating a survival effect, managerial power or both). See Coates & Kraakman, supra note 100 at 14-16.

43 For more on both this arbitrariness and its important qualifications, see Lund & Polsky, supra note • at • (summarizing research showing that firms differently filter out exogenous shocks when evaluating CEOs depending upon whether the firm performs at the low end of non-industry-adjusted performance).

44 [See, e.g., Bratton & Wachter, supra note • at •; Tung, supra note • at •; others]

45 See Bebchuk & Fried, Paying for Long-Term Performance, • (2010); Bhagat & Romano, supra note •

46 See Tung, supra note •; Bebchuk & Spamann, supra note •.

47 See Lund & Polsky, supra note • at •.

48 Of course there may remain a set of cases in which pay structure can provide important marginal incentives. For instance, CEOs nearing retirement might have little concern about the managerial labor market consequences of their actions, while the portfolio effects of those
B. Allocative Efficiency and Pay Structure Disclosure

Of course, even if compensation design can do little to change firm behavior, it might serve some other purpose. The remainder of this Article analyzes one of these alternatives: the ability of publicly disclosed pay structures to signal firm quality to markets and thereby increase those markets’ allocative efficiency. There may be other reasons to care about pay structure, but, as discussed below, pay structure appears somewhat well-suited to serving this function.

Though perhaps undertheorized, allocative efficiency in capital markets may be as or more consequential for the economy than agency cost mitigation. One can relatively easily discern some of the social costs imposed by inaccurate security prices. First and foremost, inaccurate prices will lead to an inefficient allocation of capital as too much investment rushes to firms that have poor prospects and not enough money rushes to firms that have more promising prospects. Second, if investors believe that prices are systematically inaccurate, they are less likely to invest even in socially valuable projects. Faced with a general level of inaccuracy, investors may rationally expect that those on the other side of any trade have more accurate information. Alternatively, they may simply expect that there will be a high level of volatility in the price of the security they are considering. Investors may therefore refrain from trading, either out of a fear of being exploited, generalized risk aversion, or both. As a consequence, securities markets may be less liquid, and hence less attractive to all investors. Though there is room to debate the magnitude of these costs, it is hardly controversial to say that accuracy in security pricing is a legitimate and valuable goal.

While U.S. securities law requires much in the way of disclosure, it does not require disclosure of all material information. And, absent more fulsome

actions might be material.

For example, pay structure may be useful in ensuring some level of distributional fairness. See ●; but see Bertrand & Mullainthan, supra note ● at ● (noting the level of luck involved in being a CEO at a high-performing firm and the difficulty firms have in performing relative performance evaluations).

See Marcel Kahan, Securities Laws and the Social Costs of “Inaccurate” Stock Prices, 41 DUKE L. J. 977, 980 (1992) (“Commentators… have largely failed to provide a systematic analysis of the purposes served by accurate stock prices. Most have either disregarded the issue or asserted, in broad and general terms, that stock price accuracy results in an efficient allocation of capital.”).

See e.g., id. at 1005-08; see also Bainbridge, Corporation Law and Economics at 587.

See, e.g., Kahan, supra note ● at 1018-20.

Id. at 1026-27.

For more social costs of price inaccuracy, see id. at 1029-41.

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mandatory disclosure requirements, there are good reasons for observed disclosure practices to tend away from maximum transparency. For example, some non-public information would place the firm at a competitive disadvantage were it to be disclosed. Some information is speculative enough that it would either subject members of the firm to a risk of antifraud liability should events not come to pass, or failing that, provide little grounds for the audience to credibly believe the disclosure. In short, there will inevitably be gap between material information about a firm’s prospects and disclosed material information.

The usual regulatory response to systemic price inaccuracy is to require more disclosure of firm-specific information. The “disclosure” solution to the allocative efficiency problem may also serve as a solution to agency cost problems, sunlight being thought to be the best disinfectant. Whatever the reason, increased disclosure would seem to push investments towards their highest and best uses.

Nowhere has this been seen more than in the executive compensation context where disclosure rules have mushroomed, primarily in an effort to constrain looting by insiders. Most importantly, each public company must provide a summary compensation table with data for its principal executive officer, principal financial officer and three other most highly compensated executives. This table has a number of enumerated items listed in various columns, supplemented by a column for “All Other Compensation.” At the far right of the table, the compensation is summed to offer an all-in annual compensation number for the executives. Following the Summary Compensation Table is the Grant of Plan-Based Awards Table covering the

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55 Item 402(c). [Limited effect due to “executive/officer” definition. See Katie Couric Rule articles]. Technically, firms must provide information for up to two additional persons who would qualify as one of the three most highly paid executives outside of the PEO and PFO even if those persons are no longer executives at the end of the fiscal year. Item 402(a)(3)(iv).

56 Item 402(c)(2)(i-viii). Enumerated items include Salary, Bonus, Stock Awards, Option Awards, Non-Equity Incentive Plan Compensation, and Nonqualified Deferred Compensation Earnings. For Stock Awards and Option Awards, the rules require disclosure of the grant-date fair value of the awards made during the relevant year. See Item 402(c)(2)(v and vi).

57 Item 402(c)(2)(ix). The description of “All Other Compensation” offers a non-exclusive list of possible inclusions: perquisites (if, in the aggregate, equal to or greater than $10,000; tax “gross-ups” and reimbursements; the FAS 123R value of discounts at which firm securities were purchased (unless the discount was widely available); termination payments; change in control payments; company contributions to defined contribution plans; company-paid life insurance premiums; and dividends paid on stock or option awards. See id.

58 Item 402(c)(2)(x).

59 See Item 402(d).
same executives but limited to incentive pay awards made during the most recent fiscal year under company pay plans. The table requires disclosure of future payouts under awards granted during the year at each of “threshold”, “target” and “maximum” performance levels. For both tables, companies are required to provide narrative disclosure including the terms of incentive awards described in the Grant of Plan-Based Awards Table and the salary/bonus ratio from the Summary Compensation Table.

Adding to the information widely available, firms must provide a narrative explanation of their executive compensation policies in the form of a Compensation Discussion & Analysis. In the CD&A, a public company must respond to a litany of required items: the objectives of the company's compensation programs; what the compensation program is designed to reward; and the compensation elements used (and why they are used in the particular proportion). The rules go further and suggest a number of detailed topics that might be discussed in the CD&A. These include topics that are not entirely limited to compensation questions, including the requirement of a description of “[t]he registrant's equity or other security ownership

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60 Id.
61 402(c)(iii-iv).
62 Additionally, firms are required to provide tables detailing executives’ pension benefits and non-qualified deferred compensation, see Item 402(h and i), and a description of potential payments to executives upon termination or a change in control. See Item 402(j).
63 See Item 402(b)(1).
64 See Item 402(b)(2). The long list of suggested inclusions includes: “[t]he policies for allocating between long-term and currently paid out compensation”; “[t]he policies for allocating between cash and non-cash compensation, and among different forms of non-cash compensation”; “[f]or long-term compensation, the basis for allocating compensation to each different form of award (such as relationship of the award to the achievement of the registrant's long-term goals, management's exposure to downside equity performance risk, correlation between cost to registrant and expected benefits to the registrant)”; “[w]hat specific items of corporate performance are taken into account in setting compensation policies and making compensation decisions”; “[h]ow specific forms of compensation are structured and implemented to reflect these items of the registrant's performance, including whether discretion can be or has been exercised (either to award compensation absent attainment of the relevant performance goal(s) or to reduce or increase the size of any award or payout), identifying any particular exercise of discretion, and stating whether it applied to one or more specified named executive officers or to all compensation subject to the relevant performance goal(s)”; “[h]ow specific forms of compensation are structured and implemented to reflect the named executive officer's individual performance and/or individual contribution to these items of the registrant's performance, describing the elements of individual performance and/or contribution that are taken into account”; “[h]ow compensation or amounts realizable from prior compensation are considered in setting other elements of compensation (e.g., how gains from prior option or stock awards are considered in setting retirement benefits)”; and “[w]hether the registrant engaged in any benchmarking of total compensation, or any material element of compensation, identifying the benchmark and, if applicable, its components (including component companies).” Id.
requirements or guidelines (specifying applicable amounts and forms of ownership), and any registrant policies regarding hedging the economic risk of such ownership. In response, CD&As have become incredibly large and complicated sections of the annual proxy statement.

While enhanced disclosure may or may not have reached a point of oversaturation particularly for less interested parties, there is no doubt that interested observers have the tools at their disposal to judge pay structure decisions. The compensation data, even if unwieldy, is susceptible of digestion by shareholder advisors and the press, both of whom are perhaps additionally motivated by the prurient pay-related interest of their respective audiences. Thus, more than most kinds of data, pay data (including data regarding pay structure) is broadcast to market observers who do, in fact, pay attention. Caring about pay structure could increase allocative efficiency, as long as there is something about firm quality that it can imply.

II. COMPENSATION-AS-GOVERNANCE

The next two Parts offer non-exclusive ways by which pay structure, disclosed to the markets as it is, might communicate something about firm quality. Perhaps most intuitively, pay structure for managers could signal something about the way firms are governed. If well-governed firms are, in the aggregate, better performers than poorly-governed ones, the implication is that firms with well-structured executive compensation should perform better than the alternative. This general story of the relationship between pay structure and firm quality can be summarized as “Compensation-as-Governance.”

A. Compensation-as-Incentives

The simple version of Compensation-as-Governance is not that dissimilar from the agency cost mitigation story discussed above. An incentive-laden compensation structure can be conceived as informing observers that managers are less likely to impose agency costs on their firms in the future because of the bonding costs they have incurred. On this view, in addition to minimizing agency costs, caring about pay structure could also lead capital

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65 Id.
66 [Practitioner pieces on CD&As’ unwieldy nature]
67 Research on overdisclosure
68 In addition to the disclosures described above, public companies must file material compensation agreements on Form 8-K within ● days of entering into those agreements and provide a copy and description of equity plans when seeking shareholder approval of those plans. See supra note ●.
towards higher value firms, i.e. the ones that are least likely to be affected by agency costs.

As will become clear when compared with the alternative signal, Compensation-as-Trading, there are advantages to thinking about pay structure in this way. The process by which a pay structure is agreed to becomes unimportant; all that matters is whether the right incentives are in place, meaning an _ex post_ snapshot like that provided under the disclosure rules is perfectly acceptable. Moreover, any questions over managers’ credibility are largely beside the point. This simple form of Compensation-as-Governance does not ask the manager to relay any privately-held information and is therefore not subject to his or her biases. Pay structure _is_ the source of differences in firm quality not a reflection of them. Therefore, only it needs to be spelled out in detail.

Nevertheless, as should be clear from the earlier discussion, at least the simple version of Compensation-as-Governance is problematic. This simplified version, which we can call Compensation-as-Incentives, can only signal something about managerial incentives and communicates nothing about any other aspect of firm quality. It thus requires a particularly manager-centric view of corporate prospects. Moreover, and as described above, information about managerial incentives will have an uncertain theoretical correlation to future firm performance because incentive pay appears to overlap with other incentive structures already in place.

This theoretical problem dovetails with an empirical one: there is a remarkable absence of evidence, even during the old days of relatively little alternative discipline, that pay structure affects firm performance one way or another. In perhaps the most complete survey of the finance literature on incentive compensation, John Core, Wayne Guay and David Larcker found “no … empirical consensus on how stock options and managerial equity ownership affect firm performance.” One might theorize that pay structure

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69 Negotiation history might shed some light on the agency cost effects of the structure if observers are unsure of the optimal arrangement. One might think that an arrangement that a CEO immediately agrees to is more suspect as an agency cost mitigator than an arrangement that was hotly contested. Moreover, there is surprisingly little uncertainty about “best practices” regarding pay structure, see, e.g. [Guay and Core on need for tailored analysis], so there is little need for anecdotal information to supplement the simple fact of observed structure.

70 Of course, the story is not quite so simple. These pathologies will become relevant to the extent that they make it hard for observers to determine how much agency cost reduction is occasioned by any particular pay structure.

71 [Problems]

72 John E. Core, Wayne Guay & David F. Larcker, _Executive Equity Compensation and_
matters and observed pay structures generally do not provide sufficient incentives.\textsuperscript{73} If so, there should be an observed relationship between high pay-related incentives and firm performance. But while some researchers have found consistent evidence, the evidence has been mixed elsewhere.\textsuperscript{74} Under a second hypothesis, pay structure is set optimally across firms and firms vary in their need for high levels of pay.\textsuperscript{75} Here, any correlation between pay structure and firm performance would be unexpected (based on firms’ heterogeneity) so the absence of a link between the two is confirmatory.\textsuperscript{76}

Left unstated is a third hypothesis equally consistent with the absence of empirical confirmation: pay structure might only provide trivial marginal incentives. Core et al. dismiss the possibility that incentive pay is either too high – a necessary implication of this third hypothesis\textsuperscript{77} – noting that “if all firms imposed excessively large equity incentives on executives, firms with the lowest incentive levels should be closest to optimal and have the better performance….\textsuperscript{78}” But there are, in fact, compelling reasons to expect incentive pay to be used at inefficiently high levels centered on both cognitive bias and interest group capture.\textsuperscript{79}

In any event, the point remains that the evidence supporting pay structure as a driver of firm performance is shaky at best.\textsuperscript{80} Along this line, Dennis


\textsuperscript{73} Id.

\textsuperscript{74} See id.

\textsuperscript{75} Id.

\textsuperscript{76} Core, Guay and Larcker do offer a third path under which firms contract optimally (leading to a finding of no significance between pay structure and performance) but have difficulty rebalancing incentives midstream (leading to a finding of a link between pay structure and performance in some cases). Id. at ●. See also John Core and David Larcker, \textit{Performance Consequences of Mandatory Increases in Executive Stock Ownership}, ● J. FIN. ECON. ● (●) (finding poorly performing firms with low executive stock ownership have better accounting returns following the implementation of mandatory executive stock ownership rules).

\textsuperscript{77} [See Core re: equity comp being an inefficient way to pay.]

\textsuperscript{78} Id. at 35.

\textsuperscript{79} See Lund & Polsky, \textit{supra} note ● at ● (suggesting status quo bias, investor herding, third parties’ private interests, participants’ private interests unrelated to maximizing firm value and moral attractiveness as complimentary explanations).

Michaud and Yunwei Gai more recently undertook to survey the literature and empirically test the question of correlation.\footnote{See Dennis Wright Michaud & Yunwei Gai, CEO Compensation and Firm Performance, 6-7 available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1531673.} They found only two empirical studies finding a significant correlation between incentive pay levels and firm performance.\footnote{Michaud and Gai, supra note ● at 28-29 (citing Laarni Bulan, Paroma Sanyal & Zhipeng Yan, A Few Bad Apples: An Analysis of CEO Performance Pay and Firm Productivity, available at ● and Akinloye Akindayomi & Hussein A. Wardame, The Relationship Between Executive Stock Option Compensation and Firm Value, available at ●).} Subsequently, they conducted their own empirical analysis of S&P 500 firms over the 1995-2004 period.\footnote{Id. at 31.} They concluded that, among incentive pay devices, only cash bonuses were correlated with higher levels of firm performance.\footnote{Id. at 46-47.} Interestingly, cash bonuses tend not to be the kind of incentive pay most often proposed as a solution to incentive problems at large firms.\footnote{[See Jensen in particular re: distortions]} 

Even in the case of Gai and Michaud’s cash bonus evidence or other examples of correlation between pay design and firm performance, it is unclear which way causation cuts.\footnote{Gai & Michaud, supra note ● at 48-51 (finding the correlation dissipates when endogeneity is corrected by using the instrumental variable method).} Any correlation between pay and firm performance could be due to “compensation affect[ing] performance ... firm performance affect[ing] pay, or because an unobserved firm or CEO characteristic affects both variables.”\footnote{Frydman & Jenter at 20. See also Gai & Michaud at 6-7 (citing [Yermack 1997]); see also Part ● infra for a particular version of a reverse-causation story regarding insider’s knowledge.} For example, one might hypothesize that recently empowered shareholders and boards\footnote{See supra section ●.} independently push executives to maximize share price while at the same time pushing incentive pay as a belts and suspenders insurance policy.\footnote{See Lund & Polsky, supra note ● at ●.}

### B. Compensation-as-Responsiveness

In sum, the signaling strength of Compensation-as-Incentives should be weak, given its lack of theoretical and empirical support. Yet the intuition remains a powerful one in the rhetoric over compensation policy. This mismatch suggests that we should consider the Compensation-as-Governance signal more broadly. Conceived this way, pay structure need not affect managerial incentives as much as it demonstrates a firm’s responsiveness being responsive to shareholder demands. Happily, Compensation-as-Responsiveness is able to serve as a signal of firm quality regardless of the
appropriateness of the market’s demand, e.g. for higher levels of incentive pay. Simply listening to and responding to those demands might mark firms as being likely to focus on shareholder value going forward. Perhaps, for instance, firms that are responsive to shareholder demands on pay are less likely to allow value-decreasing projects or forestall a valuable takeover. Thus, pay structure could be a signal about board quality and firm governance more generally. If so, and if governance is significantly related to firm performance, pay structure may be worth caring about given that it is viewed as a non-arbitrary market demand.

1. Tests of Governance

For Compensation-as-Responsiveness to effectively signal anything, however, outside observers must set test-related expectations and there must be regular opportunities for boards to be tested against those expectations. Pay structure decisions at public firms would appear to satisfy these conditions. To a greater or lesser extent, institutional shareholders, shareholder advisors, the press and regulators have defined rules related to pay structure. Furthermore, annual award cycles and Say-on-Pay votes serve as clearly defined testing opportunities, with firm behavior made easily observable by the enhanced disclosure regime.91

a. Market Expectations

When given the opportunity to judge compensation decisions, market observers, particularly shareholder groups, have readily done so. Shareholder advisors have adopted compensation guidelines to guide their clients in director elections, equity plan votes, and, more recently, Say on Pay votes. Beyond that, institutional investors themselves have promulgated expectations for compensation-related decisions. Finally, and more informally, the business press while not establishing or even necessarily discussing ex ante guidelines, has nevertheless evaluating firm behavior ex post as it relates to compensation.

Increasingly, shareholders are reliant on proxy advisory firms for advice regarding voting decisions.92 At the same time, the pool of shareholder advisors has narrowed so that today Glass Lewis and Institutional Shareholder Services (a division of MSCI, Inc.) dominate the field. Both groups have relatively well-developed compensation-related guidelines that they have made public and upon which they base their voting recommendations to clients.93

90 See infra notes •.
91 See supra notes •.
93 See generally, [ISS]; [Glass Lewis]
Unsurprisingly, given the power of the proxy firms with respect to voting outcomes, public companies take these guidelines seriously, going so far as to engage with the firms prior to making most compensation decisions.

ISS offers over 17 pages of compensation-related guidance in its most recent summary of its guidelines. That guidance begins with the announcement of five principles that “most investors expect corporations to adhere to in designing and administering executive … compensation programs.” Only two of these principles have anything to do with the substance of pay decisions and are largely duplicative of each other: (1) requiring appropriate focus on pay-for-performance sensitivity and (2) avoiding “pay for failure,” with guaranteed pay counting on the side of pay for failure. As one might have expected, then, ISS’ high level take on proper pay practices mirrors the faith in incentive pay’s agency-cost-related effects discussed above.

The guidelines proceed to flesh out this laser-like focus on the relationship between pay and firm performance. With respect to Say on Pay vote recommendations, ISS is on the watch for pay/performance misalignment and/or “problematic pay practices.” The latter includes “problematic practices related to non-performance-based compensation elements,” incentives towards excessive risk, and evidence of backdating. They go on to establish considerations for voting decisions on golden parachutes, equity plans, and bonus plans. Interestingly for purposes of establishing Compensation-as-Responsiveness as a viable signal, the guidelines also specify that poor responsiveness to shareholder advice on pay matters might lead to an adverse recommendation.

Glass Lewis’ guidelines are similarly geared towards ensuring appropriate pay/performance sensitivity. For Say on Pay votes, Glass Lewis looks at

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94 [Research on ISS power]
95 [Yale paper on Say on Pay]
97 Id. at 37.
98 Id. The other three principles relate to compensation committee quality, appropriate disclosure and ensuring director independence by limiting director pay. Id.
99 Id. The guidelines also name as “additional” Say on Pay considerations the evaluation of performance metrics, appropriateness of benchmarking and the ratio between performance-based and non-performance-based pay. Id. at 38.
100 Id. at 39.
101 Id. at 39-40.
102 Id. at 40.
103 Id. at 47.
104 Id. at 38.
disclosure practices, the relationship between pay and performance, appropriateness of performance metrics and the compensation levels compared to both performance and peer firms. More specifically, Glass Lewis offers a proprietary analysis of pay/performance sensitivity that leads to a grade for each firm ranging from A to F, solely on that subject.

Some institutional shareholders themselves have independently adopted compensation-related guidelines upon which they evaluate portfolio companies. For instance, CalPERS devotes a section of its Global Principles of Accountable Corporate Governance to pay issues. And, similar to the proxy advisors, its focus therein is on pay structure and disclosure. The guidelines are most specific when they detail the demands related to pay/performance sensitivity and equity compensation terms. Other institutional holders have been more circumspect, at least publicly, with respect to compensation guidance. Still others expressly rely on proxy advisors, and are consequently guided by their focus on pay structure.


106 Id.


108 Id. at ● (“A significant portion of executive compensation should be comprised of ‘at risk’ pay linked to optimizing the company’s operating performance and profitability that results in sustainable long-term shareowner value creation.”).


110 For instance, Fidelity’s voting guidelines with respect to Say on Pay and director elections simply look to whether “[e]xecutive compensation appears misaligned with shareholder interests or otherwise problematic, taking into account such factors as: (i) whether the company has an independent compensation committee; (ii) whether the compensation committee engaged independent compensation consultants; (iii) …whether the compensation committee has lapsed or waived equity vesting restrictions; and (iv) whether the company has adopted or extended a Golden Parachute without shareholder approval.” See ●, available at http://personal.fidelity.com/myfidelity/InsideFidelity/InvestExpertise/governance.shtml#ful

111 See Franklin Mutual’s Policy, available at https://www.franklintempleton.com/retail/pages/generic_content/home/proxy/proxy_policy_fma.jsf (“Investment Manager believes that executive compensation should be directly linked to the performance of the company. Investment Manager evaluates plans on a case-by-case basis by considering several factors to determine whether the plan is fair and reasonable. Investment Manager reviews the RiskMetrics quantitative model utilized to assess such plans
Finally, the business press engages in a more informal evaluation of pay practices on a regular basis. Of late, both New York Times and the Wall Street Journal have devoted special sections to executive compensation each year during proxy season when new information becomes available.\textsuperscript{112} Moreover, reports continuously surface regarding particular firms’ compensation practices either upon hiring, firing or simply paying differently.\textsuperscript{113} These “press tests” are, however, less based on guidelines promulgated ahead of time than they are responsive to some more inchoate, often populist, narrative.

b. Testable Moments

All of these observers have regular opportunities to apply these guidelines. Although executive pay is partially governed by \textit{ex ante} employment contracts between the firm and the manager, important decisions are made over consistent intervals. Option and restricted stock grants are made annually, if not more often. And even if particular equity award levels are specified in an employment contract, the annual decision will still involve any number of variables.\textsuperscript{114} Performance-based bonus targets are also set annually, partially in order to achieve favorable tax treatment.\textsuperscript{115} Thus the metrics and performance levels required for most cash bonuses are the subject of constant decisionmaking. And, of course, firms regularly enter into new employment agreements that have compensation terms either for new hires or upon the expiration of a previous agreement when renewing the employment of an incumbent.

\footnotesize{\textsuperscript{112} See e.g., Joann S. Lublin, \textit{CEO Pay in 2010 Jumped 11\%}, WALL ST. J., May 9, 2011, B1 (offering a chart of the 20 highest paid CEOs in 2010 with compensation elements broken out as per the Summary Compensation Table).

\textsuperscript{113} See, e.g., Gretchen Morgenson, \textit{Moving the Goal Posts on Pay}, N.Y. TIMES, May 8, 2011, Sunday Business 1 (questioning Wal-Mart’s decision to change performance goals for its cash bonus plan); Joann S. Lublin & Dana Mattioli, \textit{Ratias, Bonuses to Slow}, WALL ST. J., May 9, 2011, B7 (suggesting that while shareholder pressure would limit 2011 pay increases, executives would see large payouts from the vesting of equity awards granted during the previous downturn).

\textsuperscript{114} [Vesting schedules, performance hurdles, etc…]

\textsuperscript{115} See I.R.C. 162(m) (requiring shareholder approval of bonus plans in order for those plans to qualify for preferential tax treatment, i.e. be excluded from a $1 million cap on deductible compensation per employee).}
Aside from specific compensations setting-decisions, more generalized structuring decisions also happen regularly. Compliance with share ownership guidelines is tested annually. Less frequently, but still regularly (usually every five years), equity plans under which options and restricted shares are delivered are proposed and either approved or rejected by shareholders. Finally, shareholders at public companies now have the opportunity to cast an advisory vote on firms’ executive compensation practices via Say on Pay. Say on Pay votes generally occur annually, although shareholders may agree to vote as infrequently as once every three years.

Moreover, the compensation choices that firms make are conspicuous. A consistent complaint of critics has been that firms are able to hide pay decisions, including pay structure decisions, because of holes in the disclosure regime.\(^{116}\) As discussed above,\(^ {117}\) compensation disclosure is now king, taking up a significant portion of public companies’ annual reports and showing up frequently in other more frequent filings. Pay structure’s salience is heightened by the payoffs to experts who offer distilled compensation information to their relevant audiences whether they be readers, viewers, clients or voters. In short, Compensation-as-Responsiveness is a signal unlikely to be often missed,\(^ {118}\) giving it the potential to effectively signal a great deal about firm governance if there is indeed reason to think the two are related.

2. Problems

But there are reasons to doubt Compensation-as-Responsiveness’ power on the grounds that pay structure decisions do not tell us much about firm quality. Two of these are discussed below and are alternatively contextual and essential. With regard to the former, Compensation-as-Responsiveness suffers from the incompleteness of market rules on pay, in particular the absence of rules regarding pay level. These gaps create a hydraulic effect that permits firms to easily pass the tests that are imposed by the market by shifting the pressure to unmonitored areas. Few believe that even the least shareholder-oriented firms fail to maximize value when the costs of doing so are minimal which they are in this case. So only the most egregiously governed or advised firms send any sort of signal through their non-compliance with market expectations. Shareholder groups could change their practices by making the rules more complete, but there are good reasons for their retaining the gappy rules independent of pay structure’s signaling power.

\(^{116}\) [Jackson and Bebchuk on pensions; perks; others]

\(^{117}\) See supra notes ●.

\(^{118}\) It is precisely because of the salience of compensation decisions, that Utset fears the distortive effects of compensation signaling. See Utset, supra note ● at ●.
More broadly, and similar to the link between pay structure and firm performance, there is less than complete empirical evidence that responsiveness to shareholder tests leads to better firm performance. If governance and performance are only tenuously linked, any Compensation-as-Responsiveness signal is bound to be weak.

i. Pay Level as Safety Valve

As in any testing situation, the signal sent by the grade is a function of the difficulty of the test. If a test is too easily passed, that passage does not indicate much about performance quality and is not a credible signal. For Compensation-as-Responsiveness to add something meaningful to the total mix of information about a firm, the test must demonstrate something about a firm’s willingness to make hard governance choices.

How hard is it for firms to comply with market demands regarding pay? As discussed, shareholders do impose a highly developed set of compensation-related rules upon public firms, the vast majority of which center on questions of pay structure. Firms must ensure that compensation-related disclosure is robust and that compensation committee members are sufficiently independent and expert. By far the most important part of compliance, however, is achieving the proper (that is, tightest) link between pay and performance. This is obviously true in shareholder-adopted guidelines where salary-incentive pay ratios, performance vesting requirements, repricing restrictions and share ownership guidelines are prominently set out. But it is also true in the more informal press accounts of pay, where high pay is implicitly or explicitly approved of, so long as firm performance was correspondingly positive. 

A skeptic might argue that these guidelines are a paper tiger and not specific or strict enough to even ensure high levels of pay/performance sensitivity. One might expect, for example, to see a greater call for indexed options if the market were serious about shaping pay structure practices to fit the dominant narrative of agency cost mitigation. On the other hand, firms do seem to be taking the guidelines seriously, responding to them and seeking

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119 See supra note ●.
120 [Testing theory and curves]
121 See supra note ●.
122 See supra note ●.
123 See supra note ●.
124 [Morgenson articles; accounts of Pfizer turnover]
125 See, e.g., Bebchuk & Fried, supra note ● at ●.
126 See id. at ●. The reluctance to push for indexed options could be borne out of a fear of the accounting and tax consequences of such a move. See ●.
shareholder and shareholder advisor input before making pay structure decisions.\textsuperscript{127} A number of firms have received negative Say on Pay votes, ostensibly based on pay/performance issues.\textsuperscript{128} At the very least, it seems plausible to view the disproportionate explosion of incentive pay relative to salary in recent years as a result of market discipline regarding pay structure.

Let us assume, then, that the pay structure pressure applied by the market is consequential. Even then, however, the design tests are too easily worked around to provide a credible signal of firm responsiveness. They are too easy because shareholders and their advisors, while happy to suggest rules regarding pay structure, have been loath to offer guidance regarding pay levels themselves. None of the guidelines described above offer any specific statements about pay level. The closest one comes to finding definitive guidance regarding pay level are rejoinders to use appropriate firms for benchmarking purposes, leaving the matter of pay level at any particular firm something of a recursive loop.\textsuperscript{129}

The failure to discipline pay levels permits firms to comply with pay structuring requirements almost without cost, at least governance-related cost.\textsuperscript{130} Firms are free to avoid the difficult question and negotiations — arriving at an optimal pay package for executives all things considered. Instead, they are free to ensure the pay is sufficiently performance-based, while at the same time greatly increasing its expected value. In doing so, they are simply following the rules set out by incentive pay theorists over the past three decades.\textsuperscript{131} Executives who might otherwise resist the injection of greater risk in pay packages,\textsuperscript{132} are mollified (and then some) by the materially larger expected payouts. This provides a plausible cliffs notes explanation for what has happened to executive compensation over the past thirty years.

Market constituencies could become more demanding regarding pay levels, shutting off the safety valve and making pay structure decisions more powerful

\begin{footnotesize}
\begin{itemize}
\item[127] See supra note \textbullet{} [Yale paper].
\item[128] [See Ferri & Maber on UK experience with less “pay-for-failure”; case of Occidental Petroleum and other recent U.S. Say on Pay failures]
\item[129] This is not to say that at least some observers do not explicitly or implicitly disapprove of high pay levels. The business press is perhaps the most obvious example of a market watcher that imposes some discipline over pay levels, albeit sporadically and relatively gently (given its limited governance role). See \textbullet{}.
\item[130] To be sure, there are economic costs to the firm as it substitutes higher and higher levels of pay in exchange for making that pay more sensitive to performance. See Lund and Polsky, supra note \textbullet{} at \textbullet{}.
\item[131] See Jensen & Murphy supra note \textbullet{} at \textbullet{}; Bebchuk & Fried, supra note \textbullet{} at \textbullet{}.
\item[132] There are, of course, reasons that executives might not object to riskier pay packages [Chance’s research on optimistic CEOs valuing options higher than Black-Scholes value].
\end{itemize}
\end{footnotesize}
signals. After all, excess compensation paid to managers is less money in shareholder pockets. But there are good reasons to think shareholders, their advisors or any other compensation observers are poorly situated to establish such strictures and, moreover, recognize their condition. As discussed below, they are less involved in the actual negotiations between firms and executives and therefore have a less clear picture of the relevant reservation prices. More importantly, they are less likely to be aware of the marginal value of a particular manager, making them disinclined to deviate from their ex ante rules even when upward deviation would be valuable to the firm in terms of retaining or attracting the manager.

Whatever the justification, however, the failure of these groups to impose meaningful constraints on pay level allows boards to avoid making difficult compensation choices. The rails are greased even more by the retention of compensation consultants who are able to coordinate pay practices across firms making it unlikely that any client firm will be far out of the mainstream in terms of pay structure. Studies of pay across large public companies show a striking amount of homogeneity among pay structure decisions. David Walker has recently found, for instance, that by 2007 firms had drifted into three groups, awarding all options, all restricted stock or an equal mixture of both.

It is hard to construct an explanation for this phenomenon that supports optimal contracting theory. And beyond that limited level of cross-firm homogeneity, the extreme cases (all options or all restricted stock) were much less likely to occur at firms using compensation consultants.

[More on research re: homogeneity among firms in pay structure including Gordon (2009)]

This homogeneity, brought on at least partially by the freedom to displace the governance pressure to pay level, limits the signaling power of Compensation-as-Responsiveness. In practice, the only strong signal sent by pay structure decisions comes from the handful of outlier firms that bewilderingly fail to comply with the pay structure guidelines or take some other extraordinary step. Compensation-as-Responsiveness, and therefore Compensation-as-Governance more generally, may be helpful in identifying these problem firms. But any market efficiency gained by that sort of limited identification hardly seems valuable enough to justify the entire pay structuring

133 See infra notes ●.
135 For his part, Walker suggests a naïve diversification bias on the part of firms. *Id. at* ●.
136 *Id. at* ●.
137 [Recent evidence from negative Say on Pay votes]
project with all of its attendant costs.

ii. The Uncertain Link Between Pay Structure, Governance and Performance

Of course, if market expectations were such that they permitted greater separation in pay practices, Compensation-as-Governance might be able to provide a glimpse into the quality of a firm’s governance. This might, in turn, provide a glimpse into the firm’s prospects. But, then again, maybe not. First, compensation decisions may very well be different in kind from other board decisions and, therefore, able to tell observers little about general governance quality. More damningly, it may be that firm governance is only loosely correlated with future firm quality. In either case, Compensation-as-Governance loses much of its potential signaling capacity.

Boards are well aware of the salience of compensation decisions. Accordingly, directors with career concerns or those averse to criticism and shareholder interference are likely to devote substantial resources to satisfying market expectations regarding pay.\(^{138}\) It is possible that these calculations lead to perverse results, whereby pay decisions are made to mask negative information.\(^{139}\) Aside from that sort of extreme, though, pay decisions may nevertheless fail to reflect the range of governance decisions a firm faces. Boards may be responsive to shareholder demands because they feel they have to be. This sort of “teaching towards the test” leaves open questions about governance quality in other less public, but perhaps even more important, spheres. [Add other reasons for comp decisions and overall decisions to be delinked]

Even if pay decisions were indicative of general board responsiveness, it remains far from certain the degree to which firm performance is a function of that responsiveness. The link between the two has been researched and hotly debated for some time. For purposes of this argument, however, it need only be granted that the evidence in favor of the connection is inconclusive.\(^{140}\) On this point, even the most famous research demonstrating a correlation between governance and firm performance is circumspect about drawing conclusions based on a potential endogeneity problem.\(^{141}\) [Develop


\(^{139}\) See Utset, supra note ● at ●.

\(^{140}\) See, e.g., Sanjai Bhagat, Brian Bolton & Roberta Romano, The Promise and Peril of Corporate Governance Indices, 108 COLUM. L. REV. 1803, ● (2008) (“The empirical literature investigating the effect of individual corporate governance mechanisms on corporate performance has not systematically identified positive effects and is, at best, inconclusive.”).

\(^{141}\) See, e.g., Paul Gompers, Joy Ishii & Andrew Metrick, Corporate Governance and Equity
The sum of these questions should give pause to those who would view any Compensation-as-Governance signal as a strong predictor of firm performance.

III. COMPENSATION-AS-TRADING

Aside from information about firm governance, pay structure might be able to transmit other kinds of information about a firm’s prospects. Specifically, choice of pay structure might send a credible signal to markets about the managers’ expectations for the firm based on inside information. Consider an executive with some quantity of material non-public information about the firm. He is offered a choice of taking his pay in either a fixed salary or stock options.\textsuperscript{142} If he holds inside information and this information leads him to believe the firm is currently overvalued, he would choose the salary option, thereby avoiding the loss is sure to be incurred as a result of the inaccuracy. If, on the other hand, his inside information leads him to conclude that the firm’s shares are undervalued, he would choose the options, thereby pocketing the gain made available by the inaccuracy baked into the options’ exercise price.\textsuperscript{143} In either case, information about the firm that would otherwise remain hidden for an indefinite period of time is disclosed, assuming

\begin{quote}
\textit{Prices}, 118 Q. J. OF ECON. 107, \textbullet{} (2003)(“Since this is an experiment without random assignment, no analysis of causality can be conclusive. The main problem is the possibility that some unobserved characteristic is correlated with G and is also the main cause of abnormal returns. This type of omitted-variable bias could be something prosaic, such as imperfect industry adjustments or model misspecification, or something more difficult to quantify, such as a partially unobservable or immeasurable ‘corporate culture’. Under the latter explanation, management behavior would be constrained by cultural norms within the firm, and democracy and dictatorship would be a persistent feature of a corporate culture; G would be a symptom, but not a cause, of this culture. In this case, all the results of the paper could be explained if investors mispriced culture in 1990, just as they appear to have mispriced its proxy, G. The policy impact of reducing G would be nonexistent unless it affected the culture of managerial power that was the true driver of poor performance… We conclude that the remaining performance differences, which are economically large, were either directly caused by governance provisions … or were related to unobservable or difficult-to-measure characteristics correlated with governance provisions….”).
\end{quote}

\textsuperscript{142} Restricted shares would be a viable choice only if the executive had some uncertainty about firm prospects, generally believing the share price to be undervalued but remaining uncertain of that view. Shares would give him some upside potential in case his hunch was correct while providing a value floor in case he was wrong.

Assuming something less than 100\% certainty, he will also charge a premium for bearing the risk, regardless of the option/share decision. Consequently, the deviation between the exercise price or share price, on the one hand, and the “true” price adjusted for inside information, on the other, will need to be more than \textit{de minimis}. For more on the confounding effects of executive risk aversion, see infra notes \textbullet{}.

\textsuperscript{143} The exercise price for stock options is almost always based on the grant date share price.
disclosure of the pay structure.

This example – call it “Compensation-as-Trading” – is but a cousin to the much-maligned practice of spring-loading options, whereby executives influence the grant date of their options (and thus those options’ exercise prices) so that they occur immediately prior to good news which thereafter causes the share price (and the value of the executives’ options) to increase.\textsuperscript{144} The difference between the two is simply that spring-loading takes the option pay structure for granted and the executive seeks to increase its value through strategic use of inside information, whereas in the choice of stock options over salary, the executive is able to exploit his initial influential position vis-a-vis pay structure itself. But if observers took spring-loading for granted, disclosure of option grants would signal that executives believe the stock to be undervalued and should lead to a share price run-up.

In either the optimistic or pessimistic case, outsiders could observe the pay design choices made by those possessing inside information and conclude that the shares were currently misvalued in one direction or another. This is but a species of Gilson and Kraakman’s “derivatively informed trading mechanisms.”\textsuperscript{145} To use their phrase, pay structure choice serves as a kind of “trade decoding,”\textsuperscript{146} whereby the non-insider traders are able to observe the buy/sell behavior of insiders, presume those insiders to be acting pursuant to relevant inside information and consequently follow their lead.\textsuperscript{147}

\textbf{A. Compensation-as-Trading Versus Insider Trading}

In fact, the ability of pay structure, and in particular high incentive pay levels \textit{vel non}, to signal something about firm quality has a well-known precursor in the governance literature: the argument in favor of insider trading as a means for producing market efficiency. Henry Manne first made this point, arguing that insider trading would have the salutary effect of permitting inside information to seep into the public markets, thereby adjusting share prices more closely to their “true” levels.\textsuperscript{148} On this view, given a constant

\begin{itemize}
\item \textsuperscript{144} For more on spring-loading, see
\item \textsuperscript{145} See Ronald J. Gilson & Reinier H. Kraakman, \textit{The Mechanisms of Market Efficiency}, 70 VA. L. REV. 549, 572-79.
\item \textsuperscript{146} \textit{Id}. at 573-74.
\item \textsuperscript{147} \textit{See Scholes from G&K fn 78}
\item \textsuperscript{148} Henry Manne, \textit{INSIDER TRADING AND THE STOCK MARKET} (1966). Manne’s original explanation regarding the exact mechanism for this seepage involved the increased supply of shares occasioned by the insiders’ newfound interest in selling. Gilson and Kraakman, among others, have noted that the increase in supply due to insider trading will be too small to have an effect on share price. \textit{See Ronald J. Gilson & Reinier H. Kraakman, supra note \textbullet} at 629-630. Manne subsequently defended his position on the ground that insider trading would
\end{itemize}
baseline level of inside information, insider trading would provide a reasonably good opportunity for getting that information into the light.\footnote{149} 

As has been noted elsewhere, however, the ability of insider trading to serve this function is severely compromised.\footnote{150} Most importantly, it is very costly, and perhaps impossible, for market participants to determine the identity of those trading in a firm’s securities. Insider trading is prohibited by the securities laws.\footnote{151} As a result, those engaged in the practice take significant pains to disguise their identities when trading. Even if the prohibition were relaxed and coupled with mandatory pre-trade disclosure,\footnote{152} insiders would continue to have incentives to trade outside of the system so as to not adversely affect share prices by the disclosure of share sales. That is, they would try avoid signaling through insider trading. As a result, this sort of trade decoding will function very slowly and sporadically, if at all.\footnote{153}

Interesting, pay structure choices dominate insider trading as a derivatively informed trading mechanism on these points. Most importantly and as discussed above, disclosure of pay structure choices is broadly and consistently disseminated. Because of these mandatory disclosure rules, the signaling capacity of Compensation-as-Trading is not contingent on an uncertain string of disclosure decisions, making its decoding costs are far less. Thus, the choice between contingent and fixed pay will be known.

Unlike trades based on non-public information, top executives at public companies have less reason to hide their compensation-related behavior from outside observers. Given positive inside information, executives accepting high levels of equity awards have no reason to hide those awards because any corresponding price increase happens after the award is granted. The relevant exercise price (for options) is not increased by any market reaction, nor are the allow information to seep into the market. \textit{See} Henry Manne, \textit{Economic Aspects of Required Disclosure under Federal Securities Laws, in Wall Street in Transition} 21, 74-79 (Manne & Solomon eds. 1974).

\footnote{149} See Kahan, \textit{supra} note \textbullet{} at 1002. Manne also advocated for relaxing insider trading rules on the grounds that insider trading would provide an efficient compensation mechanism. \textit{See} Manne, \textit{supra} note \textbullet{} at \textbullet{}. Recently, Todd Henderson has shown that boards may in fact be permitting some level of insider trading in exchange for lower compensation payouts. \textit{See} Henderson, \textit{supra} note \textbullet{} (showing that firms at which insiders are likely to be engaging in informed trades under the auspices of Rules 10b5-1 trading plans are paid less than their counterparts at firms at which informed trading is less likely).

\footnote{150} [Manne’s critics]

\footnote{151} To the extent that insiders do trade in the firm’s securities, they are required to report those trades [Section 16]

\footnote{152} This is Gilson & Kraakman’s solution to the problem. \textit{See} Gilson & Kraakman, \textit{supra} note \textbullet{} at \textbullet{}.

\footnote{153} \textit{See} Stephen Bainbridge, \textit{CORPORATION LAW AND ECONOMICS} at 590.

\textbf{DRAFT WORK-IN-PROGRESS: PLEASE DO NOT CITE WITHOUT PERMISSION}
gross amounts of awards (for stock awards) reduced to account for that reaction. Thus, in many cases we should expect insiders to do everything in their power to publicize the pay structure.

On the other hand, there may be cases where the insider’s negative inside information causes them to negotiate for less contingent pay, but, unlike trades based on non-public information, top executives at public firms cannot unilaterally choose to hide their pay as they could with sales of company stock. Boards and other internal monitoring bodies are intimately involved with the preparation of an annual report and, having negotiated the pay structure choice, would have to be complicit in any such subterfuge. Manuel Utset has suggested that firms, including their boards, will rationally adjust compensation decisions specifically because of signaling effects. The signal he is concerned with is the signal of manager quality and he argues that firms will be less likely to reduce pay for fear of indicating to the world that the incumbent manager is performing poorly before firm results otherwise do. But in the context of pay structure, the argument is easily extended such that firms might artificially increase pay/performance sensitivity in an effort to signal positive inside information even when the news is negative. But unlike the increasing or steady pay level hypothesized by Utset, increased pay/performance sensitivity at a floundering firm will impose costs on managers who are unlikely to accept the package passively.

B. Uncertainty Regarding Choice Constraints

In any event, the strength of Compensation-as-Trading’s signal is directly related to the freedom a manager has to choose his pay structure. A manager with total discretion over pay structure can choose to accept varying degrees of performance sensitivity therein. Thus, the design, once observed, can be viewed by the market as almost entirely a function of his or her prediction about firm prospects. But as the manager’s power over structuring pay diminishes, the observed design becomes harder to interpret as a signal of his inside information. The audience is left to rightfully wonder whether the manager was forced to take highly contingent pay in spite of his belief that the

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154 A manager could avoid board oversight by hedging against firm-specific risk after the fact. Hedging decisions are required to be disclosed, but managers could systematically fail to do so. [research into executive hedging]

155 See supra note ●.

156 Id. at ●.

157 Again, it is possible that managers would accept the high levels of sensitivity and then immediately hedge against the risk. See supra note ●. It is also possible that managers with career concerns might be willing to sacrifice short-term pay at troubled firms in order to send a signal that would buoy share price and thereby maintain their positions.

158 This is subject to potential hedging moves. See supra note ●.
firm would fare poorly going forward. \footnote{159} If observers are unsure of the level of managerial power in any given instance, they will naturally discount the quality of Compensation-as-Trading as a signal about firm prospects. Unfortunately for the prospects of Compensation-as-Trading, the extent of executive power over pay design will, at best, be unclear in any given case and may often be too negligible to justify any reliance.

1. Private Negotiations and Information Failures

The actual level of executive power over the choice of pay structure will be uncertain because market participants are largely excluded from the pay negotiation process. Pay negotiations with managers are conducted confidentially. Only the results are made public, with the relevant bids and asks usually remaining hidden from view forever. In this world, no one but the people at the table knows whether the board’s compensation committee forced a high level of incentive pay down the manager’s throat or whether the manager angled for higher levels of contingent pay.

This lack of relevant information is but another example of the difficulties facing outside monitors in corporate governance. The executive compensation contract is negotiated by the board without direct shareholder or third-party involvement. \footnote{research on secrecy of comp negotiations}

Just last year, Say on Pay was enacted as part of the Dodd-Frank financial reform. \footnote{160} While only advisory, firms appear to take the Say on Pay votes seriously. \footnote{161} Evidence from the UK, for instance, shows that pay-for-failure declined after Say-on-Pay’s enactment there. \footnote{162} In the U.S., instances of negative say-on-pay votes have occasioned significant corporate changes. \footnote{163} Moreover, it appears that the influence of Say on Pay is felt at the design stage, with firms consulting with shareholder advisory groups and significant shareholders over pay decisions, including pay structure. \footnote{164}

But Say on Pay does not require the transparency of negotiations necessary to permit Compensation-as-Trading to send credible signals. First, the institutional shareholders and shareholder advisory groups do not publicize the content of communications they have with firms during the pay-structuring

\footnote{159} The opposite situation might also be hypothesized, though it seems less likely given the pressure placed on firms to pay with higher proportions of contingent pay.

\footnote{160} For criticism of mandatory Say on Pay in the U.S., \textit{see} Gordon, \textit{supra} note \footnote{●} at \footnote{●}; \textit{Lund}, note \footnote{●}.

\footnote{161} \textit{Yale paper}

\footnote{162} \textit{See} Ferri & Maber, \textit{supra} note \footnote{●} at \footnote{●}.

\footnote{163} \textit{Occidental}

\footnote{164} \textit{Yale study}
process. In fact, institutional shareholders have every reason to avoid disclosing that an executive is pessimistic about firm chances, lest the market react negatively. Moreover, even if these shareholder groups were willing to disclose what they learned in their conversations with firms, those conversations are unlikely to contain any information regarding the bargaining that led to the agreed-upon proposal. Firms are understandably reluctant to explain to shareholder groups the details of whether the executive resisted high levels of incentive pay or not.

The problem of uncertainty is solved in some contexts, however. When acquirers buy target firms and simultaneously enter into compensation arrangements with incumbent executives, they serve as both pay negotiation observers (indeed, participant) and trade decoders. As a pay negotiator they are able to observe the subtle and otherwise hidden responses of incumbent managers to pay structuring proposals. They can see how willing an incumbent is to invest his or her own money in the target firm going forward or make his or her future compensation contingent on firm performance. As trade decoder, they can immediately translate those signals of firm quality into price adjustments as they negotiate to purchase the firm.

We might then expect Compensation-as-Trading to be promising in the takeover context, at least in cases where the acquirer has an interest in retaining incumbent management. Along these lines, targets acquired by private equity firms thereafter pay their managers via highly incentivized pay packages. In recent work, Robert Jackson studied 108 firms that went through the IPO process between 2000 and 2004, having had a private equity owner at the time of the IPO. While CEOs in previously private-equity-controlled firms were not paid any more or less than CEOs at comparison firms, their pay exhibited much higher levels of pay-for-performance sensitivity. Other researchers have found similar discrepancies between managers at public companies and those at firms taken private.

From this evidence, Jackson concluded that public, i.e. non-private-equity-
controlled, firms face serious agency-related constraints in pay-setting.\footnote{Jackson, supra note \& at \&.}

Implicit is the assumption that high levels of performance-based-compensation proxy serve as a proxy for good governance or low agency costs. That is, private equity firms are able to run a tighter ship than public shareholders, meaning that they are able to enforce value-maximizing employment terms like heavily incentive-laden pay structures.

But that is not the only available interpretation. Just as plausibly, the taste for high levels of performance-based pay at private equity-acquired firms could be driven by signaling concerns. During the acquisition process, incumbent managers are likely to have private information about the target firm that private equity firms do not, even assuming high levels of research. The managers’ willingness to invest such a significant chunk of their wealth in the company going forward sends a credible signal about firm quality to private equity buyers considering purchase of the target.\footnote{See, e.g., Leslie & Oyer, supra note \& at 4. (“If any manager is unwilling to make a significant investment (often described as an investment on par with their home) then it is crucial to understand why. Is it because of personal financial limitations? If so, the PE firm will find creative ways to help the manager invest. Or is it because the manager has private information about the business that brings into question future profitability? Hence, increased equity participation of managers may be as important for mitigating adverse selection as it is for overcoming moral hazard.”).}

Thus, given a reasonably broad and interchangeable array of potential targets, private firms should be expected to purchase only those targets at which incumbent managers are willing to accept high levels of incentive pay. By behaving this way and requiring incumbent managers to “put their money where their mouths are,” the outsider (in this case, the acquirer) receives “assurance that the firm is likely to make a positive profit.”\footnote{See Edward P. Lazear, Output-Based Pay: Incentives, Retention or Sorting?, 3, available at \&.}

2. Substantive Limits, Norms and External Pressure

While there may be opportunity to receive clear signals from Compensation-as-Trading in the limited context of to-be-acquired firms, there will be little strength to the signal in the normal course as long as managers are not free to write their own contracts. Of course, one might resist that assumption by adopting a relatively strong version of Bebchuk, Fried and Walker's famed managerial power thesis.\footnote{See Bebchuk, Fried & Walker, supra note \&.} In the paradigmatic case, shareholders at public companies are disempowered, boards are obsequious and executives are consequently able to control their pay level and structure, limited only by outrage constraints.\footnote{See id. at \&.} Whatever the pathologies of such a
structure, the result of the compensation process in a world of managerial power would be able to clearly signal executives’ inside information about firm prospects. The observed structures, on that account, would be entirely indicative of manager preferences and, therefore, manager information. The need to know anything about the negotiation history would be minimal because the theory predicts that managers’ bids are the observed pay structures.

The managerial power thesis has been the subject of much criticism elsewhere and enjoys only limited empirical support. [Description of recent work critical of BFW]

Moreover, even if some managers retain significant power over pay structuring decisions, it will usually be impossible for observers to determine which ones are the powerful ones because the process is closed. Observers, face with limited information, must guess at the power exerted by the relevant manager. Faced with that choice and the costs involved in investigating the particular level of managerial power at any firm, the observers are better served assuming uniform levels of managerial power over pay structuring across firms. Given the data described above, it seems plausible to think that they are better off assuming low managerial power over pay structuring. This, in turn, should naturally lead observers to discount any signal that Compensation-as-Trading might send.

C. Uncertainty Regarding Managers’ Credibility

Beyond uncertainty over managerial power, observers have other reasons to discount the credibility of Compensation-as-Trading. They may understandably believe that managers suffer significant biases when evaluating firm prospects and their relationship with potential pay structures. On the one hand, managers may be likely to be more risk-averse than observers in terms of increasing their investment in the firm through larger incentive awards. On the other hand, they may be more likely to overestimate the value of those awards due to overoptimism that peculiarly affects managers. Which way these biases fall out in any case will be difficult for observers to predict, making any signal sent by the manager through his or her choice of pay structure that much more questionable for purposes of evaluating firm prospects.

Again, a caveat is in order for the case of an empowered manager who is nonetheless sensitive to market reaction to pay structure disclosure, either because of portfolio concerns or career concerns. Such a manager might substitute higher levels of risky pay even if he or she were entirely in control of the pay process. See infra note ●.
1. Risk Aversion

Famously, managers at public firms make a significant firm-specific investment in human capital. Further, these executives are limited in their ability to hedge against firm-specific risk, whether it be portfolio-related or labor-market-related. The finance canon instructs that this causes them to generally avoid risks. Increased shareholdings may exacerbate this aversion, but at least stock options were traditionally seen as a way to encourage managerial risk-taking.

Those managers are also generally expected to discount the value of options because of the compensation risk, heightened by the underdiversification attendant to all equity-heavy pay structures, that they create. Accordingly, to induce risk-averse managers to accept incentive-laden pay structures, they must be made more valuable (on an expected-value basis) than pay arrangements that include greater proportions of fixed pay. The introduction of risk premiums into Compensation-as-Trading is not necessarily problematic. If the premium is known for any given executive, observers can analyze the observed pay structure in that light. For instance, if an executive is expected to discount an option grant by 50%, observers could simply hypothetically increase the option award and decrease fixed compensation to arrive at a risk-adjusted reflection of the manager’s optimism about firm prospects.

But observers are poorly situated to determine the appropriate discount rate for any particular manager. The answer will depend on a number of executive- and firm-specific factors. For example, wealth-constrained CEOs

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175 See, e.g., Brian J. Hall, Six Challenges in Designing Equity-based Pay, 15 J. APPLIED CORP. FIN. 29 (Spring 2003) ("One of the most commonly alleged benefits of options is that they help overcome managers’ natural aversion to risk."); see also Melvin A. Eisenberg & Brett H. McDonnell, Expectation Damages and the Theory of Overreliance, 54 HASTINGS L. J. 1335, 1366 n.36 (2003)

176 See ●. This phenomenon is not limited to equity options. Any form of pay that is contingent on firm performance will introduce additional undiversifiable risk into the compensation package.

177 See Kevin J. Murphy, Politics, Economics, and Executive Compensation, 63 U. CIN. L. REV. 713, 739 ("Executives shifting from salaries to performance-based compensation will demand a premium for bearing more risk, resulting in higher pay levels.")

178 See Brian Hall & Kevin Murphy, Stock Options for Undiversified Executives (2000) at 8-9 (devising executives’ certainty-equivalent value lines for option awards). The riskiness of the compensation will also depend on the ability of the executive to hedge the risk through the purchase of derivatives and other devices. Of course, it is central to most incentive pay proponents that executives not be able to rebalance in this manner. See, e.g., Hall & Murphy, supra note 157 at 7. The recent financial reform bill requires greater disclosure around executive hedging activities. To the extent executives are limited in their ability to hedge
experience significant wealth effects related to firm performance by holding even a small amount of firm equity. The confusion introduced by that simple sort of CEO heterogeneity pales in comparison to less transparent idiosyncrasies regarding risk tolerance. Different people will react differently to incentive structures, and this heterogeneity will not necessarily be apparent to outsiders. Taking all of these factors together with respect to stock option grants, Hall and Murphy conclude that managers may apply anywhere from a 37% to a 79% discount to the Black-Scholes value of an option grant. Needless to say, that represents a large margin for error should observers attempt to divine information about a manager’s inside information from his willingness to take on risky pay.

2. Overoptimism

At the other end of the spectrum, observers may justifiably believe that a manager might systematically overvalue the incentive pay awarded him or her. In that case, observed pay structures would send a low-quality signal regarding the manager’s private knowledge as managers at low quality firms might be surprisingly happy to accept incentive pay. This overvaluation of incentive pay could be a result of managers’ overoptimism regarding firm prospects. In particular, executives are liable to overestimate their ability to positively influence firm performance.

against firm-specific risk, the risk premium they charge will obviously be higher. Previous scholarship has suggested that executive hedging was practically difficult and quite rare, see David M. Schizer, Executives and Hedging: The Fragile Legal Foundation of Incentive Compatibility, 100 COLUM. L. REV. 440, 459-93 (practically difficult); Brian J. Hall & Kevin J. Murphy, The Trouble With Stock Options, 17 J. ECON. PERSP., 49, 55 (2003) (“quite rare” in practice), and the recently enacted disclosure requirement should make hedging even more difficult and rare. As a result, we ignore the prospect of executive hedging in this Article.


180 See, e.g., Carola Frydman & Dirk Jenter, at 12 (“The optimal incentive strength depends on parameters that are unobservable, such as the marginal product of CEO effort, the CEO’s risk aversion, the CEO’s cost of effort, and the CEO’s outside wealth. These free variables make it easy to develop versions of the principal-agent model that are consistent with a wide range of empirical patterns.”)

181 See, e.g., Karl Okamoto and Douglas Edwards, at 30 (suggesting that forced deleveraging via a shift from equity compensation to debt compensation may cause some executives to take even greater risk in an attempt to replicate the returns they had originally experienced).

182 See Hall & Murphy, supra note at 11.

183 Executives may also overestimate their willingness, in the future, to expend effort necessary to drive firm performance. See [intertemporal discounting literature]. Nevertheless, assuming that executives systematically overestimate their quality and the marginal effect of that quality on firm performance, any miscalculation of future effort will be insignificant.
This overestimation could arise either from a miscalculation of the effect of any executive’s effort on firm performance, a miscalculation of their personal qualities, or both. More than others, managers tend to believe that they can successfully navigate risks facing their firms.\textsuperscript{184} When granted some degree of control and subject to relatively little feedback, managers are free to overestimate the likelihood of future success.\textsuperscript{185} As a theoretical matter overconfident candidates have been shown to hold an advantage in the internal promotion tournament at firms.\textsuperscript{186}

If executives are overoptimistic regarding their ability to positively influence share price (and, thus, incentive pay rewards), then they will overvalue those rewards. Tung-Hsiao Yang and Don Chance recently provided theoretical support for this intuitive proposition.\textsuperscript{187} They posited that executives expect future stock price to be a function of current stock price, executive effort and the elasticity of stock price with respect to executive effort.\textsuperscript{188} The last element serves as a proxy for an executive’s belief of his or her ability to individually influence share price and incentive award payouts.\textsuperscript{189} Yang and Chance concluded that a ten-year option would be valued at $1.31 without taking changes in executive effort into account, but at $2.97 taking those changes into account.\textsuperscript{190} The results are so significant that executive valuation of options (assumed to be at the upper bound allowed by assumed changes in stock price due to increased executive effort) may exceed Black-Scholes valuations of the same options, even taking the executive’s liquidity discount into account.\textsuperscript{191}

Because the manager will experience greater certainty regarding his effort level than outside observers, the manager’s valuation of the option should tend


\textsuperscript{185} [Weinstein 1980; Barnard; others]

\textsuperscript{186} [Goel & Thakor]

\textsuperscript{187} Tung-Hsiao Yang & Don M. Chance, The Effect of Executive Confidence, Ability and Private Beliefs on the Valuation of Stock Options (2011), 19 available at ●.

\textsuperscript{188} Id. at 7

\textsuperscript{189} Id. at 7 (“This quality measure will also incorporate the executive’s confidence and his private beliefs about his ability to take actions that will increase the price of the stock.”). Yang and Chance assume perceived elasticities of 0.1, 0.25 and 0.5 as benchmarks, consistent with the literature. See id. at 14. There are serious reasons to doubt that elasticities of this magnitude frequently exist. [] Nevertheless, given systematic overoptimism among managers, see supra notes ●, these values are within reason.

\textsuperscript{190} Id. at 19. They also found ranges of $1.76-$4.85 for seven-year options and $2.17-$7.32 for five-year options.

\textsuperscript{191} Id. at 19-20 (phenomenon occurs when volatility or risk aversion is low and maturity is seven years or less).
toward the higher level while the observers should tend more to the lower level. Moreover, even if observers’ expectations of effort are not very different from the beliefs of the managers, it stands to reason that overoptimistic managers will assume higher elasticities than observers. Recall that elasticities serve as proxies for executive quality.\footnote{See supra note \text{●}.} Thus, if managers are overconfident about themselves, this will be reflected in their valuation of the incentive awards they receive. Unless the observers have access to managers’ personal perceptions of their own quality and sensitivity of firm performance to that quality, observed structures involving high incentive pay could be misinterpreted as signs of confidence based on inside information unrelated to executive effort, i.e. more credible inside information less subject to cognitive biases. Of course, without other kinds of CEO-specific information, observed structures involving low incentive pay could be misinterpreted as signs of pessimism unrelated to CEO risk aversion. How the battle comes out in any case is usually unknown because the costs of investigation are likely to be high. The resulting uncertainty greatly weakens the Compensation-as-Trading signal.

IV. Conclusion

[to come]