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Should Directors Reduce Executive Pay?

by
RANDALL S. THOMAS*

Introduction

America is rapidly becoming a two-tiered society. Over the past two decades, the gap between worker and executive pay and the size of societal income inequalities have increased rapidly.¹ Companies have made large awards of potentially lucrative stock options to corporate executives and highly skilled workers, whereas at the lower levels of the job ladder, compensation has risen much more slowly.² While the starkness of these trends was masked by rapid economic growth in the late 1990s, those at the top end of the pay scale received a disproportionate share of this new wealth.

After years of lurking in the wings, the collapse of the Enron Corporation and the ensuing corporate governance crisis, coupled with the current economic recession, have thrust these internal corporate pay disparities onto the center stage of American life. Congressional hearings on the vast differences in the way that Enron Corporation treated its top executives and all other workers have filled the media with shocking stories that have outraged many

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1. See, e.g., PAUL RYSCAVAGE, *INCOME INEQUALITY IN AMERICA: AN ANALYSIS OF TRENDS* (1999); Daniel H. Weinberg, *A Brief Look at Postwar U.S. Income Inequality*, in BUREAU OF THE CENSUS, *CURRENT POPULATION REPORTS*, 1 P60-191 (1996); see also Constance Mitchell Ford & Patrick Barta, *Income Gap Broadens Amid Boom*, WALL ST. J., Jan. 18, 2000, at A2 (low-income workers' salary gains are tiny compared with the enormous gains of professional workers in high tech and other industries). But see Jon E. Hilsenrath, *Income Gap Narrowed at End of '90s*, WALL ST. J., April 24, 2002, at A2 (reporting some narrowing of income gap, although "[f]ew doubt that the gap between rich and poor has widened substantially during the past 30 years").

2. Patrick Barta, *Rises in Many Salaries Barely Keep Pace with Inflation*, WALL ST. J., Feb. 1, 2000, at A2.

citizens.³ The fate of that company's unemployed white and blue collar laborers, whose 401(k) plans and pensions evaporated with their company's collapse, compared to that of Enron's executives, who sold its stock before the market collapsed and whose pensions escaped the company's slide into bankruptcy, offered a vivid illustration of the difference in how corporations treat powerful managers compared to the rest of their employees.

Corporate boards have been barraged with criticism for these differences. While labor groups, including the AFL-CIO, have for years attempted to pressure corporate boards to reduce executive and white collar workers' pay arguing that the large gaps between worker and manager pay are inequitable,⁴ the current scandals have shaken things up far more. This proxy season, shareholder activist groups have launched repeated attacks on corporate pay practices, claiming that increased levels of wage inequality are harmful to society.⁵ Should corporate directors respond to these claims? Do executive pay practices harm their firms and implicate boards' fiduciary duties to maximize firm value?

This Article argues that wide gaps between the top and bottom of the pay scale can, in certain circumstances, directly and adversely affect firm value. It further contends that corporate boards should be informed about these effects and in many cases they should reduce internal pay differentials to address them. In support of this thesis, this Article analyzes numerous empirical studies illustrating that wide disparities in corporate pay scales can adversely affect firm value.

3. See generally N.Y. TIMES, Feb. 10, 2002 (containing over a dozen stories about the Enron collapse and its effects, including several on its implications for executive pay practices). See also Jennifer Hill & Charles M. Yablon, *Corporate Governance and Executive Remuneration: Rediscovering Managerial Positional Conflict*, 25 U. New S. Wales L.J. 1 (2002) (executive compensation is a corporate governance problem arising out of managerial conflicts of interest).

4. The AFL-CIO's web site provides its perspective on why current executive pay practices have led to this pay gap. Executive PayWatch, at <http://www.aflcio.org/paywatch>. Executive PayWatch allows individuals to compare their own salaries with those of corporate executives of ninety-six firms. The site also provides information on how shareholders can decipher proxy statements and use their proxies and the shareholder-proposal mechanism to encourage change. *Id.*

5. Nigel Cope, *Big Investors Attempt to Derail the Boardroom Gravy Train*, INDEPENDENT (London), May 10, 2002, at P24, available at 2002 WL 20195248. One particularly active group has been United for a Fair Economy's Responsible Wealth Project. Their website, <http://www.responsiblewealth.org>, details concern about the dangers of excessive income inequality and their efforts to change executive pay practices to address those problems. They have been frequent sponsors of shareholder resolutions designed to attack wage gaps between CEOs and workers in the 1999-2000 proxy season. *Id.*

Specifically, these studies demonstrate that in many organizations, as internal pay differentials grow, employees and lower level managers increasingly perceive their compensation as unfair in comparison to more highly paid top management. This perception adversely affects employee performance, productivity and willingness to work, and thereby reduces firm value. Therefore, directors' duty of care should require that they consider the spread between the high and low end of the corporate pay scale when setting firm compensation levels and act in the corporation's best interests to reduce it if necessary to maximize firm value.

This Article goes on to demonstrate that an important cause of growing pay differentials are mega-grant stock option awards.⁶ Corporate directors are uninformed about the real costs and benefits of these expensive grants.⁷ Mega-grants of stock options to corporate managers are unjustified if their uncertain benefits are exceeded by their high costs. As virtually no research has shown that the benefits of these grants exceed their cost, directors have no evidence that these programs maximize firm value. Once again, directors' duty of care should obligate them to be informed about the net benefits of these grants because it constitutes material information that both directly and indirectly affects the value of their firm.

Section I of this Article examines internal pay differentials and the impact of CEO compensation contracts on them. It begins with a discussion of the size of these differentials and economists' theories about executive pay, including the justifications for "pay-for-performance" contracts, whereby CEOs receive large blocks of options to buy their company's stock. This section then analyzes the stock option components of current CEO pay contracts and identifies them as a significant cause of the rapid expansion in internal pay differentials at most American corporations.

Section II considers the existing empirical research into the effects of internal pay differentials and stock option awards on firm value. Research documents that large disparities in compensation between managers and workers can lower firm value. Little work has been done to determine if mega-grants of stock options to executives

6. A mega-grant of stock options is an award with an initial value of more than \$10 million. *Id.* at 35. Over 50% of the CEOs of Fortune 200 companies received such grants in 2000. *Id.*

7. Shareholders have reacted to these high costs with steadily increasing opposition to stock option plans in recent years. Randall S. Thomas & Kenneth J. Martin, *The Determinants of Shareholder Voting on Stock Option Plans*, 35 WAKE FOREST L. REV. 31, 33 (2000).

increase firm value. This Article concludes with the argument that directors' duty of care should require them to be better informed about the effect of internal pay differentials and the value of stock option awards, and in certain circumstances to lessen pay differentials.

I. Corporate (Executive) Pay Inequalities

A. Internal Pay Inequalities Are Growing

At most American corporations, the gap between the highest and lowest paid employees has widened enormously over the past thirty years. For example, in 1970, the average CEO at an S&P 500 company made roughly thirty times more than a production worker.⁸ By 1996, this gap had widened to 210 times the average earnings of a production worker.⁹

The magnitude of these pay differentials can be further illustrated by comparing executive pay increases with the growth in pay for other workers. From 1982 to 1994, the average CEO's pay increased 175%, or approximately 8.8% per year.¹⁰ If total wealth increases are measured by including the change in the value of stock options, average CEO wealth increased by 269.7% during that twelve year period, or 11.5% annually. By contrast, the rate of increase for average compensation for all workers during that same time period was only 0.6% a year.¹¹ State and local government workers' pay did slightly better, averaging 0.9% per annum.¹² Only Major League Baseball players and National Basketball Association players achieved annual increases similar in size to those of CEOs.¹³ The gap between executive and worker pay increases continued to widen in

8. Kevin J. Murphy, *Executive Compensation*, in 3 HANDBOOK OF LABOR ECONOMICS 2485, 2553 (O. Ashenfelter & D. Card eds., 1999) (comparing the gains that executives realize from exercising stock options). As I discuss in the section below, these differentials may have negative effects on employee morale and productivity. Further fueling worker anger is the fact that corporate layoffs frequently lead to stock price increases, especially in industries with excess capacity. Workers thus perceive that the value of executive stock options increases when they lose their jobs. *Id.*

9. *Id.*

10. Brian J. Hall & Jeffrey B. Liebman, *Are CEOs Really Paid Like Bureaucrats?*, 113 Q. J. ECON. 653, 665 (1998).

11. *Id.*

12. *Id.*

13. As Hall and Liebman note, however, "these very high growth rates in sports leagues are distorted by complicated changes in rules governing free agency and salary caps." *Id.*

2000. The average compensation for all other workers went up only 4.5% in 2000, the highest increase in the last five years, while CEO pay increased 8.2%.¹⁴

International comparisons also illustrate disparities in U.S. compensation. American executive compensation is many times that of comparable executives in Europe and Japan.¹⁵ The pay gap between CEOs and line workers is also many times greater in the U.S. than elsewhere. At large Japanese firms, the average CEO earns only seventeen times more than the average worker. CEOs at German and French firms make about twenty-four times more than the average worker at those firms.¹⁶ By contrast, over the same time period, American CEOs' pay averaged 109 times that of their company's workers.¹⁷

Stock option compensation is the principal cause of these differences.¹⁸ The widening gap between American CEOs' pay and that of the average workers at their firms arises out of the marked increase in the long-term compensation elements of CEO pay packages.¹⁹ Similarly, when we compare American CEOs' pay with foreign CEOs' pay, the biggest difference between them is that

14. Joann S. Lublin, *Hedging Their Bets*, WALL ST. J., Apr. 12, 2001, at R4.

15. See Brian R. Cheffins & Randall S. Thomas, *Regulation and the Globalization (Americanization) of Executive Pay*, in GLOBAL MARKETS, DOMESTIC INSTITUTIONS: CORPORATE LAW AND GOVERNANCE IN A NEW ERA OF CROSS-BORDER DEALS (forthcoming 2003) for an extensive discussion of the international pay gap for CEOs. See also Murphy, *supra* note 8, at 2496 (noting that American executives are paid more than twice that of executives in other countries). U.S. executives get a higher fraction of their pay in stock options, and less in salaries, than their counterparts in other countries. *Id.* However, at least one commentator views the fact that American executives make more than their foreign counterparts as a reason why the American economy is so strong. Ira T. Kay, *High CEO Pay Helps the U.S. Economy Thrive*, WALL ST. J., Feb. 23, 1998, at A22. "It turns out that high CEO pay—provided it is linked to performance—is a crucial factor making the U.S. economy the most competitive in the world." *Id.*

16. PAUL MILGROM & JOHN ROBERTS, *ECONOMICS, ORGANIZATION & MANAGEMENT* 425–36 (1992).

17. One partial explanation for these differences may be that American executives are not given lifetime employment contracts, as Japanese executives often are. Furthermore, U.S. companies face a much higher risk of a hostile takeover than companies in other countries. *Id.* This makes U.S. executives' job tenure even less secure. Greater pay packages may be necessary in order to compensate American managers for the greater employment risks that they bear.

18. Kevin J. Murphy, *Explaining Executive Compensation: Managerial Power versus the Perceived Cost of Stock Options*, 69 U. CHI. L. REV. 847, 866 (2002) (explaining that the increase in CEO pay in the 1990s primarily reflects a dramatic growth in stock options).

19. MILGROM & ROBERTS, *supra* note 16, at 427.

American companies make much greater use of stock options.²⁰ The pay differences between American and foreign companies are limited to CEO pay; existing data show no significant differences in pay for lower level employees.²¹

B. Economists' Theories of Executive Pay and Pay Differentials

Corporate boards routinely negotiate compensation agreements with CEOs and other top management. These contracts are designed both to reward executives for their efforts on the company's behalf and to encourage them to continue to work hard in the future. Economists have devoted a lot of attention to understanding the market for corporate executives and to the appropriate design of executive compensation contracts.²²

20. Cheffins & Thomas, *supra* note 15; Murphy, *supra* note 8, at 2497. The higher levels of risk assumed by American CEOs, who do not have lifetime employment guarantees and therefore bear more of the risks associated with unsuccessful projects they initiate, could explain why incentive pay is prevalent in the U.S. and nonexistent in other countries. MILGROM & ROBERTS, *supra* note 16, at 431; *see also* EDWARD P. LAZEAR, PERSONNEL ECONOMICS FOR MANAGERS 236 (1998) (stating that promotions may depend on more random factors in U.S. than Japan and therefore require a wider spread in compensation structure in order to create adequate incentives).

21. Murphy, *supra* note 8, at 2497 (summarizing studies).

22. Business and Economics literature has been generous in its analysis of executive compensation and the problems of designing and implementing appropriate contracts. *See* George P. Baker et al., *Compensation and Incentives: Practice vs. Theory*, 43 J. FIN. 593 (1988); Andrew R. Brownstein & Morris J. Panner, *Who Should Set CEO Pay? The Press? Congress? Shareholders?*, HARV. BUS. REV., May–June 1992, at 28; John E. Garen, *Executive Compensation and Principal-Agent Theory*, 102 J. POL. ECON. 1175 (1994); Brian J. Hall, *A Better Way to Pay CEOs?*, in EXECUTIVE COMPENSATION AND SHAREHOLDER VALUE 35 (Jennifer Carpenter & David Yermack eds., 1999); Joseph G. Haubrich, *Risk Aversion, Performance Pay, and the Principal-Agent Problem*, 102 J. POL. ECON. 258 (1994); Rachel M. Hayes & Scott Schaefer, *Implicit Contracts and the Explanatory Power of Top Executive Compensation for Future Performance*, 31 RAND J. ECON. 273 (2003); Benjamin E. Hermalin & Michael S. Weisbach, *Endogenously Chosen Boards of Directors and Their Monitoring of the CEO*, 88 AM. ECON. REV. 96 (1998); Bill Gross, *The New Math of Ownership*, HARV. BUS. REV., Nov.–Dec. 1998, at 68; Michael C. Jensen & Kevin J. Murphy, *Performance Pay and Top-Management Incentives*, 98 J. POL. ECON. 225 (1990) [hereinafter Jensen & Murphy, *Performance Pay*]; Michael C. Jensen & Kevin J. Murphy, *CEO Incentives—It's Not How Much You Pay, But How*, HARV. BUS. REV., May–June 1990, at 138 [hereinafter Jensen & Murphy, *CEO Incentives*]; David I. Levine, *Fairness, Markets, and Ability to Pay: Evidence from Compensation Executives*, 83 AM. ECON. REV. 1241 (1993); Wilbur Lewellen et al., *Executive Compensation and Executive Incentive Problems: An Empirical Analysis*, 9 J. ACCT. & ECON. 287 (1987); Brian G. M. Main et al., *Top Executive Pay: Tournament or Teamwork?*, 11 J. LAB. ECON. 606 (1993); Kevin J. Murphy, *Top Executives Are Worth Every Nickel They Get*, HARV. BUS. REV., Mar.–Apr. 1986, at 125 [hereinafter Murphy, *Top Executives*]; Charles A. O'Reilly III et al., *CEO Compensation as Tournament and Social Comparison: A Tale of Two Theories*, 33 ADMIN. SCI. Q. 257 (1988); Uma V. Sridharan, *CEO Influence and*

In neo-classical economic analysis, well-functioning labor markets have informed active buyers and sellers. In the market for corporate executives, the corporation, acting through a compensation committee of its board of directors, is the buyer of management services.²³ The compensation committee negotiates with the sellers of management services, the executives or potential executives of the corporation, over the terms of their pay packages. The value of the compensation ultimately paid can be thought of as the price for executive services.

In the standard neo-classical economic model, arm's length negotiations between an informed buyer and an informed seller lead to a competitive price prevailing in the market.²⁴ The firm hires additional labor up to the point that the cost of an additional worker, the wage rate, equals the additional revenue that the worker brings into the firm.²⁵ This model presumes that workers are quick to change jobs to take advantage of differentials in wages or benefits, and that firms rapidly adjust their employment levels as demand for their product changes. The model further predicts that workers and companies will engage in only limited investments in developing their human capital.²⁶

Executive Compensation, 31 FIN. REV. 51 (1996); James Wade et al., *Golden Parachutes: CEOs and the Exercise of Social Influence*, 35 ADMIN. SCI. Q. 587 (1990); Charles A. O'Reilly et al., *Overpaid CEOs and Underpaid Managers: Equity and Executive Compensation* (1996) (Stanford Univ., unpublished working paper) (on file with author) [hereinafter O'Reilly, *Overpaid*].

23. Detlev Vagts, *Challenges to Executive Compensation: For the Markets or the Courts?*, 8 J. CORP. L. 231, 235 (1983).

24. In a perfectly competitive market, there are a large number of sellers of a uniform product, a large number of consumers of the product, low barriers to entry, and perfect information about market conditions. HAL R. VARIAN, *MICROECONOMIC ANALYSIS* 55 (1978). When these conditions prevail, then a profit maximizing firm will set the price of its goods equal to its marginal revenue which will also be equal to its marginal cost. *Id.*

25. MILGROM & ROBERTS, *supra* note 16, at 327; DEREK BOK, *THE COST OF TALENT: HOW EXECUTIVES AND PROFESSIONALS ARE PAID AND HOW IT AFFECTS AMERICA* 14-15 (1993).

26. MILGROM & ROBERTS, *supra* note 16, at 328. Human capital is defined as the "knowledge and acquired skills a person has that increase his or her ability to conduct activities with economic value." *Id.* This term is further refined into two categories: firm-specific capital, which has value only to the particular firm where the worker is employed; and general purpose capital, which increases the worker's productivity at several different employers. *Id.*

In the neo-classical model, employers will have no incentive to invest in developing workers general purpose capital, only in their firm-specific capital. *Id.* Workers, on the other hand, will be interested in improving their general purpose capital, but not their firm-specific skills. *Id.* As a result, the model predicts that there will be little investment in human capital. *Id.*

Most modern labor markets do not function in this manner. In most sectors neither companies nor workers change employment as frequently as the neo-classical model predicts.²⁷ Both groups invest in training programs that would have little value if the neoclassical model was accurate.²⁸ Furthermore, the notion that executives are being paid an amount equal to the marginal product of their labor sheds little light on the current levels of executive compensation.²⁹ The neoclassical model's poor explanatory value has led economists to develop alternative models of the labor market.

Modern labor economics begins with the recognition that most employment relationships are long-term, incomplete, relational contracts, involving important implicit elements and assigning most authority to the employer.³⁰ These contracts are relational contracts, in that they set forth only the general terms of the relationship between the parties and some mechanisms for resolving unforeseen contingencies. The parties' written contract is supplemented by unwritten, self-enforcing understandings referred to as implicit contracts.³¹ While most middle level managers are employed through these implicit contracts, top executives increasingly negotiate formal contracts.³²

Internal corporate labor markets are based on long-term, incomplete, relational contracts.³³ In these markets, workers are hired

27. *Id.* at 329. There may be some spot labor markets where wages are set on a daily or hourly basis based on supply and demand in which the neo-classical model of labor markets may be an accurate description. *See id.* However, such markets are the exception.

28. *Id.*

29. O'Reilly, *Overpaid*, *supra* note 22, at 3.

30. MILGROM & ROBERTS, *supra* note 16, at 329. These features are a function of the difficulty of foreseeing and describing future events, and the costs of negotiating explicit terms of an employment agreement if these contingencies could be determined with any certainty.

31. *Id.* at 332. Compare Andrei Shleifer & Lawrence H. Summers, *Breach of Trust in Hostile Takeovers*, in CORPORATE TAKEOVERS: CAUSES AND CONSEQUENCES 33 (Alan J. Auerbach ed., 1988) (stating that a corporation is a nexus of contracts, many of which are implicit ones that the corporation must be trusted to honor).

32. Murphy, *supra* note 8, at 2491. These contracts typically last a period of five years, specifying "minimum base salaries, target bonus payments (with or without guarantees), and severance arrangements in the event of separation or change in corporate control." *Id.* For an analysis of the legal components of these contracts, see Stewart J. Schwab & Randall S. Thomas, *What Do CEOs Bargain For?: An Empirical Analysis of Key Legal Components of CEO Contracts* (Vanderbilt Law & Econ. Working Paper 2002) (on file with author).

33. An internal labor market is defined as consisting of "an employer and (some particular group of) its long-term employees. There may be more than one internal labor

by the corporation at entry level positions and stay with the same employer for many years.³⁴ Their career path relies on promotions inside the company.³⁵ These internal labor markets interact only to a limited degree with the larger external labor market.³⁶

Promotions within an internal labor market have been analogized to tournaments: the best performers in the workplace are promoted to the next level of jobs.³⁷ At each level of the organizational job ladder, workers are competing with other workers for a fixed number of spots in an elimination tournament.³⁸ The

market within a single firm, each involving different groups of workers." MILGROM & ROBERTS, *supra* note 16, at 359.

34. Long-term employment relationships are efficient ways of organizing internal labor markets for several reasons: first, they encourage the formation of firm-specific human capital; second, they permit the use of implicit, relational contracts in which promises of fair treatment and loyalty are enforced by internal mechanism and reputational considerations; and third, they allow for monitoring of employee performance over longer periods of time to evaluate their contributions to the firm. *Id.* at 363.

35. Pay levels within an internal labor market may be relatively insulated from external market forces. *Id.* at 360. Firms will, however, need to compete to attract workers at the entry level, and may need to hire senior people from outside the firm at market rates. *Id.*

36. *Id.* at 359 (noting that few workers from outside the firm compete with those in internal market for advancement within the firm).

37. The analogy is to single elimination sports tournaments, such as tennis tournaments. LAZEAR, *supra* note 20, at 225. The best player wins the match and receives the prize associated with being the winner. *Id.* In this context, relative performance is the key. *Id.*

Firm internal labor markets are claimed to be like these sports tournaments in several ways. *Id.* First, the participants in most internal labor markets are restricted to persons already working for the firm in the position just below the one with an opening. *Id.* Second, workers are promoted because they are relatively better than the other workers in their current position. *Id.* Third, workers are claimed to try harder to obtain the promotion based on the spread between their current compensation and the compensation for workers at the next level, that is the spread in pay. *Id.* at 225–26. However, if there are other factors that affect a worker's chances of being promoted, such as luck, or variables outside of their control, this will reduce worker's incentives to work harder and require larger wage gaps between positions to induce the same level of increased worker effort. *Id.* at 235. For an extensive discussion of tournament theory as an explanation for corporate pay scales, see *id.* at 223–52.

Tournament theory has also been applied in models of law firm promotion of associate lawyers. See, e.g., MARC GALANTER & THOMAS PALAY, *TOURNAMENT OF LAWYERS: THE TRANSFORMATION OF THE BIG LAW FIRM* 77–120 (1991). For a recent critique of this application, see David B. Wilkins & G. Mitu Gulati, *Reconceiving the Tournament of Lawyers: Tracking, Seeding, and Information Control in the Internal Labor Markets of Elite Law Firms*, 84 VA. L. REV. 1581, 1582 (1998).

38. Tournaments have several advantages as a method of allocating promotions: first, they require only ordinal information about the relative capabilities of the contestants for the jobs, which is generally reasonably available at a relatively low cost; second, looking at relative performance eliminates the common elements of uncertainty that may affect the

winner of the tournament receives the immediate prize of a better job with higher pay and benefits, plus the valuable chance to compete for a job at the next level.³⁹ The value of this “option” to compete later for higher positions gives additional incentives to the players in the lower rounds.⁴⁰

As the winners progress up the job ladder, there are fewer higher levels to attain. For each winner, this reduces the value of their option to compete for future jobs. In order to maintain the incentives to compete, an employer must therefore increase the direct financial gains from obtaining a promotion as individuals rise in the hierarchy.⁴¹ This means that the increase in pay must increase as an individual reaches higher managerial levels. This is especially true for the pay gap between the CEO and the level of executives directly below that position, because there are no further competitions for the CEO to win.⁴² In fact, empirical studies have demonstrated that pay differentials increase between ranks as workers climb corporate job ladders, with the promotion to CEO resulting in an extraordinary jump in pay.⁴³

Tournament theory offers a potential explanation for large disparities between the salaries paid to middle managers and workers on the one hand, and CEOs on the other.⁴⁴ Competitors are incentivized by the high spread in the potential payoffs to seek the higher positions. This is claimed to lead to greater productivity and a more efficient organization.⁴⁵

Tournament theory may also explain why the gap between lower and upper level employees increased so rapidly in recent years. The

performance of all of the applicants; and third, they reduce the incentives that employers may have to act opportunistically in renegeing on performance payments. LAZEAR, *supra* note 20, at 243–45; MILGROM & ROBERTS, *supra* note 16, at 368–69.

Some other fundamental characteristics of economic tournament theory include: that the quality of the work performed by the workers is hard to monitor; and that firms nevertheless succeed in providing incentives that stimulate employees to work hard. Wilkins & Gulati, *supra* note 37, at 1591–92; *see also* O'Reilly, Overpaid, *supra* note 22, at 6.

39. LAZEAR, *supra* note 20, at 240; MILGROM & ROBERTS, *supra* note 16, at 376; O'Reilly, Overpaid, *supra* note 22, at 6.

40. LAZEAR, *supra* note 20, at 240. Of course, some players may choose not to compete. To the extent that numerous workers elect this option, the validity of this assumption of tournament theory must be called into question. Wilkins & Gulati, *supra* note 37, at 1606–07.

41. LAZEAR, *supra* note 20, at 240; MILGROM & ROBERTS, *supra* note 16, at 376.

42. LAZEAR, *supra* note 20, at 240.

43. MILGROM & ROBERTS, *supra* note 16, at 376.

44. O'Reilly, Overpaid, *supra* note 22, at 3.

45. *Id.* at 6

restructuring of American business beginning in the late 1980s resulted in the downsizing of many levels of middle managers. Tournament theory predicts that reducing the number of levels of potential promotions will lower the incentives workers have to strive for advancement, unless there are offsetting increases in the pay associated with higher level jobs.⁴⁶ Raising CEO salaries increases the ultimate prize that a manager can win through promotions and thus offsets the disincentives of having fewer intermediate advancement steps.⁴⁷

Such tournaments are criticized for ignoring the negative effects on those that do not advance and obtain the prizes.⁴⁸ In settings where cooperation is more valuable than competition, tournaments can create ill will and mistrust that hurt productivity. "In this sense, tournament theory is based on the assumption that competition encourages increased effort but ignores the effects of competition when performance results from cooperation among interdependent participants."⁴⁹ In other words, firms holding tournaments wind up full of "losers" in the management ranks below the CEO.⁵⁰

A related concern is that managers may be able to increase their chances of advancing to higher positions through political maneuvers and acts of sabotage rather than on their merits.⁵¹ This undermines the efficiency arguments in favor of a tournament style pay structure and supports a more compressed wage structure in the upper levels of organizations.⁵² As discussed in section III below, more equitable pay systems may be preferable.

46. MILGROM & ROBERTS, *supra* note 16, at 428.

47. Tournament theory also suggests an explanation for why incentive pay is the largest component of CEO compensation. Once you reach the top of the pyramid, there is no where else to advance. *Id.* Any financial incentives thus must come from being paid for performance. *Id.* Thus, as is observed, explicit performance pay should become most important to those at the top of the organization. *Id.*

48. *Id.*

49. O'Reilly, *Overpaid*, *supra* note 22, at 7; Wilkins & Gulati, *supra* note 37, at 1614 (noting that "[a] firm structured entirely as a tournament would not be an environment that fostered cooperation simply because one's success in the standard tournament is a direct function of others not performing as well").

50. O'Reilly, *Overpaid*, *supra* note 22, at 7.

51. *Id.*; *see also* Wilkins & Gulati, *supra* note 37, at 1614 (noting potential for sabotage in competitive setting; also pointing out that those determining who advances in the firm may not judge candidates solely on their merits but also on whether they perceive them to be threats).

52. O'Reilly, *Overpaid*, *supra* note 22, at 7.

In any type of pay system, incentive pay can motivate workers to put forth their best efforts.⁵³ These incentives can be explicit ones, where the employees' contracts link pay with measures of individual productivity or performance. Alternatively, an employer may use implicit incentive pay with no simple link between individual performance and pay.⁵⁴ Implicit incentive pay schemes are much more prevalent than explicit ones because of the difficulties in specifying advance performance goals and in adequately measuring performance after the fact. However, these difficulties may be overcome where there is a good proxy for the desired performance goal.⁵⁵

CEO pay is one situation where an adequate proxy for individual performance may be available. While it would be impossible to try to enumerate all of the potential scenarios that a CEO will have to deal with, most shareholders would agree that the company's stock price would serve as a reasonable measure of the overall performance of the company's top officer.⁵⁶ If this measure is accepted, then an explicit compensation contract could be based on the company's stock price performance.⁵⁷

Stock options and other explicit incentive compensation instruments became an increasingly important part of executive pay packages.⁵⁸ They were frequently justified on the grounds that they represented "pay-for-performance," that is, they base an executive's

53. Compensation policies can have a variety of other, sometimes competing, goals. MILGROM & ROBERTS, *supra* note 16, at 390. Some potential goals include attracting and retaining quality employees with the organization, signaling the values that the company values, and helping employees decide how to allocate their time. *Id.*

54. *Id.* at 402. In these situations, there may be subjective or poorly articulated criteria for pay raises and promotions. *Id.* They have incentive aspects to them, though: "[a]t a minimum, those who perform especially badly may be fired, and in most situations this is a spur to attempting to perform acceptably." *Id.*

55. *Id.* at 402-03.

56. Of course, stock price performance is not just a function of CEO effort. There are many other factors that influence a firm's stock performance, such as the economic condition of the countries or industries that use its product or from which it buys its inputs. This "noise" in the company's performance places certain risks on managers. Sarah A.B. Teslik et al., *Executive Compensation*, in 24TH ANNUAL INSTITUTE ON SECURITIES REGULATION 153, 165 (Harvey L. Pitt et al. eds., 1993) This is an unavoidable cost of pay-for-performance plans. *Id.* See *infra* notes 15-18 for further discussion of the interaction of risk and incentive pay.

57. MILGROM & ROBERTS, *supra* note 16, at 403. See *infra* section B for a discussion of some of the problems associated with the use of stock prices as a measure of CEO performance.

58. Linda J. Barris, *The Overcompensation Problem: A Collective Approach to Controlling Executive Pay*, 68 IND. L. J. 59, 64 (1992) (arguing that "[s]tock option plans are the fastest-growing component of compensation packages.").

remuneration on her company's increase in value.⁵⁹ Performance based compensation became widely accepted in the corporate world in the 1990s,⁶⁰ although critics claimed that the amounts awarded were excessive.⁶¹

Boards of directors responded to requests for increased pay for performance by awarding mega-grants of stock options to many top executives. These grants sharply increased the size of top executive ownership of company stock and options. In all, executives (and other employees) in 1998 held an average 12.7% of the stock in large American companies on fully diluted basis, a substantially greater percentage of their company's stock than they did ten years ago.⁶²

Over the past year, the disadvantages of option compensation have become more apparent, leading to an increasingly heated debate about its value. As noted above, pay-for-performance is said to stimulate managers to work harder to increase their company's value by giving them a share of any gains that they helped to create. While this remains true today, more attention is being paid to the question of how much of the additional wealth created should be allocated to managers, and what portion to stockholders.⁶³ Furthermore, since 1998, firms that introduced unexpectedly highly dilutive stock option plans have suffered stock price declines.⁶⁴

59. Steven A. Bank, *Devaluing Reform: The Derivatives Market and Executive Compensation*, 7 DEPAUL BUS. L.J. 301, 306 (1995) (stating that stock options have been approved by Congress as performance-based compensation). In theory, boards could use changes in salary and bonuses to incentivize managers to perform better. However, under current conditions, it seems very unlikely that this will occur. Hall, *supra* note 22, at 13. Political pressures will prevent boards from awarding huge bonus payments that are likely to attract criticism from the media and shareholders, whereas friendly boards are unlikely to be willing to cut executive pay sharply when things go poorly. *Id.*

60. See Joshua A. Kreinberg, Note, *Reaching Beyond Performance Compensation in Attempts to Own the Corporate Executive*, 45 DUKE L.J. 138, 148 (1995) (noting the "near total lack of resistance" to the notion of performance-based compensation).

61. See section II *infra* for further discussion of this point.

62. IRRC (Investor Responsibility Research Center) estimates that the average potential dilution resulting from existing stock option plans is approximately 12.7% in 1998, a more than one percentage point increase from 1997. DREW HAMBLY & ALESSANDRA MONACO, POTENTIAL DILUTION 1998, at 1 (1999); see also Murphy, *supra* note 8, at 2534. A decline in the size of executive share holdings has been more than offset by an increase in their option holdings. *Id.* at 2534-35.

63. Thomas & Martin, *supra* note 7, at 59-60.

64. KENNETH J. MARTIN & RANDALL S. THOMAS, WHEN IS ENOUGH, ENOUGH?: MARKET REACTION TO HIGHLY DILUTIVE STOCK OPTION PLANS AND THE SUBSEQUENT IMPACT ON CEO COMPENSATION 27 (Vanderbilt Univ. Law School, Law & Econ., Working Paper 02-06, 2002).

Another oft-cited virtue of stock options is that they can align the incentives of managers and shareholders to maximize firm value.⁶⁵ In widely held public corporations, this alignment function is an important corporate governance tool for reducing management agency costs. However, the recent downturn in the stock market has highlighted a problem with options as an alignment mechanism: stock options have little downside risk for executives holding them, and therefore once their exercise price drops below the market value, the managers holding them have no incentive to limit corporate losses. In other words, executive stock option holders' incentives are identical to shareholders' incentives when the stock price is increasing, but diverge dramatically from them once the stock price starts falling.

This divergence of interests in falling markets also appears when we consider the difference in views between shareholders and executive stock option holders with respect to downside risk. Stock options were originally promoted as a means of inducing risk averse managers to act more like shareholders.⁶⁶ Managers are risk averse because their jobs and salaries are at risk if the corporation becomes insolvent.⁶⁷ The value of their salaries are fixed, and relatively invariant if the firm's fortunes fluctuate substantially. However, a manager's value in the labor market could decline if her company takes risks and they do not pay off.⁶⁸ Thus, it was claimed that managers were too risk averse in their corporate decision making because they have little to gain if the company does well and much to lose if it does poorly.

Stock options give managers incentives to undertake more risky, high return projects because the expected value of stock options rises with the volatility of the underlying stock's price.⁶⁹ Managers that

65. LAZEAR, *supra* note 20, at 122; Hall, *supra* note 22, at 4; *see also* Murphy, *supra* note 8, at 17 (noting that "[s]tock options provide a direct link between managerial rewards and share-price appreciation").

66. Murphy, *supra* note 8, at 2510 n.29.

67. In other words, managers are undiversified because their human capital and financial capital are invested largely in their own company. For this reason, and the fact that they are often restricted in their exercise or sale of the options, company executives will place a lower value on stock options than other investors would. *Id.* at 2510. These effects will be mitigated or offset by managers' access to superior information about the company's future prospects which may allow them to time their exercise of their options. *Id.*

68. MILGROM & ROBERTS, *supra* note 16, at 430.

69. *See* Clifford W. Smith, Jr. & Ross L. Watts, *The Investment Opportunity Set and Corporate Financing, Dividend, and Compensation Policies*, 32 J. Fin. Econ. 263, 275 (1992).

receive option grants therefore have incentives to undertake business projects that increase the volatility of the company's asset values.⁷⁰

But these incentives are asymmetric. Executives holding large quantities of stock options have incentives to take big chances to drive their companies' stock price up to increase the value of their options. If these big risks pay off in a temporary stock price run up, executives can cash out their options, and make millions of dollars in profits. Furthermore, if executives see that their gambles are not paying off, they may also try to hide this from investors by "cooking the books" or other dishonest practices.

If the big gambles do not pay off, then the executives' stock options value can only drop to zero, even if the stock price falls far below the options' strike price. So executives have incentives to worry about upside risks, but to undervalue downside risks.⁷¹

Shareholders care about both types of risks, although they may feel differently about systematic risks, those endemic in the entire system, and unsystematic risks, those that are particular to a single company. Undiversified stockholders worry about both (company specific) unsystematic risks and systematic risks.⁷² They value company specific upside and downside risks when they are investing in a company, as well as systematic risks from a variety of sources including, the economy or the failings of our corporate governance system.⁷³ Diversified shareholders, by holding a portfolio of stocks from different companies, can eliminate the risk that one company's performance will have too dramatic an effect on their investments as a whole.⁷⁴ However, they cannot eliminate systematic risks that may arise if all companies whose stock they hold exhibit the same problems.

If executives at *all* companies hold stock options, and this leads them to engage in excessively risky (or dishonest) behavior, then the risk created can become a systematic one and all shareholders will care. In other words, if stock options create a serious corporate

70. Murphy, *supra* note 8, at 2510 (citing studies).

71. Note that the executives will suffer other harms if the stock price drops far enough, such as potential unemployment and loss in the value of their stock holdings.

72. See RICHARD A. BREALEY & STEWART C. MYERS, *PRINCIPLES OF CORPORATE FINANCE* 153 (5th ed. 1996) (giving a general discussion of systematic and unsystematic risk).

73. *Id.*

74. *Id.* at 153–54. In finance terms, shareholders can eliminate firm-specific risk through diversification strategies. *Id.* In large public corporations, with large numbers of shareholders who can spread their risks widely, shareholders may be effectively risk neutral. *Id.*

governance problem, then they are a systematic risk. Even if such practices only arise at some firms, the unsystematic risks created can still impose enormous costs on investors and the economy.⁷⁵

Options may have other failings too. Stock options were promoted at many companies because they were viewed as a relatively cheap way to compensate executives for accounting purposes. Under existing accounting rules, stock options can be issued without charging anything against a company's earnings,⁷⁶ whereas cash compensation must be deducted from earnings. Particularly for start-up firms and high tech companies with little cash, options were a preferred form of payment during the stock market boom of the 1990s.

Today, under tremendous pressure from shareholders, most notably Warren Buffett, this appears to be slowly changing. In 2002, many companies have announced that they will charge the cost of stock options against their earnings, and those that do not must face increased questioning from analysts and others about their footnote disclosures on these costs. International accounting standards have also been changed to require companies to deduct the cost of stock options, and the United States Congress has legislation before it that would require companies to expense options. This may make the true cost of options more apparent to both directors and investors.

75. Alan Beattie, *Corporate Scandals Will Cost the US \$35 Billion*, FIN. TIMES, Sept. 5, 2002, at 4 (estimating that the costs of the corporate governance crisis to the American economy will exceed \$35 billion).

76. See AM. INST. OF CERTIFIED PUB. ACCOUNTANTS, INC., APB OPINION 25: ACCOUNTING FOR STOCK ISSUED TO EMPLOYEES, 2 APB ACCOUNTING PRINCIPLES 6735, 6736-38 (1972). If the options have a predetermined exercise price and expiration date, no cost is recognized by the company when the option is granted if it has no intrinsic value (the spread between the market price and exercise price) at the time of the grant. Mark A. Clawson & Thomas C. Klein, *Indexed Stock Options: A Proposal for Compensation Commensurate with Performance*, 3 STAN. J.L. BUS. & FIN. 31, 35 (1997). Most companies grant options with an exercise price at fair market value at the time of the grant, so there is no accounting expense incurred. *Id.*

The subsequent tax consequences are calculated at the time of the exercise of the option. If the stock options are non-qualified, then when they are exercised, the executive realizes a taxable gain equal to the difference between the exercise price and the market price at the time of the exercise. *Id.* The company can take a compensation expense deduction for the same amount. Murphy, *supra* note 8, at 2514. For qualified, or "Incentive Stock Options" ("ISOs"), the manager does not pay taxes at the time of exercise, but rather at the eventual time of sale of the security (if the security is sold). *Id.* The company cannot take a tax deduction for ISOs. *Id.*

Options also create opportunities for corporate executives to unfairly exploit their informational advantages over shareholders.⁷⁷ Corporate insiders have access to better information about their companies than outside shareholders. Insiders know when the firm is about to announce important information, or the industry is about to undergo material changes. Although the federal securities laws prohibit insiders from trading on material information, there are many ways in which insiders can do so with relative impunity.⁷⁸ Insiders' ability to exercise options provides them with a means to capitalize on their informational advantage.

Finally, there has been a flurry of academic research indicating that options are an expensive way to compensate executives compared to cash. Several studies have shown that the cost to companies of issuing options, as measured by the Black-Scholes formula, far exceeds the value that executives attach to them.⁷⁹ This difference stems from the contingent nature of the option's value, which leads executives to attach a lower certainty value to them. Using stock options as a form of compensation only makes sense if the difference between their cost to the company and their value to the executive, say ΔC , is less than any additional value that options create that is not created by cash compensation, say ΔV . The ΔV may be comprised, for example, of any value that arises from better alignment of shareholders' and managers' interests which, as noted above, is uncertain.

All of these factors have led to new calls for reconsideration of the use of stock option compensation, especially mega-grant awards. As we will see in section II.B, directors may want to consider alternative ways of aligning investor and manager incentives.

II. Large Internal Pay Differentials May Reduce Firm Value

In recent years, scholars have studied the connection between the size of internal pay differentials and firm value. As discussed below, they have found that large internal pay differences can lead to reduced firm value. Where these differentials are caused by large stock option grants, it is unclear if there are offsetting benefits.

77. Charles M. Yablon & Jennifer Hill, *Timing Corporate Disclosures to Maximize Performance-Based Remuneration: A Case of Misaligned Incentives*, 35 WAKE FOREST L. REV. 83, 113–14 (2000).

78. *Id.*

79. BRIAN HALL & KEVIN J. MURPHY, STOCK OPTIONS FOR UNDIVERSIFIED EXECUTIVES 11 (U.S.C. Marshall School of Business, Working Paper No. 01–16, 2001).

Corporate directors' fiduciary duties should require them to take into account these effects on shareholder value.

A. Internal Pay Differentials Affect Firm Value

Big executive pay-for-performance packages may have negative effects on the efforts and productivity of lower paid members of the firm. Numerous studies have shown that large disparities between CEO pay and the pay of other managers and employees of the firm adversely impact employee morale, productivity and turnover.⁸⁰ These effects have been studied using social comparison theory. This theory rests on the observation that people compare themselves to other people in a variety of ways.⁸¹ These social comparisons have significant consequences on peoples' perceptions and actions. Within an organization, social comparisons often lead to a belief that inequities exist.⁸² Further studies directly link these feelings of inequity to "lower productivity, a loss of group cohesion, theft, lower quality, and increased turnover."⁸³

80. O'Reilly, *Overpaid*, *supra* note 22, at 4.

81. The seminal article was Leon Festinger, *A Theory of Social Comparison Processes*, 7 HUMAN RELATIONS 117 (1954). Festinger claimed that people engage in self-evaluation of their abilities and opinions by comparing themselves to other people who are similar in certain ways. *Id.* at 121. He believed that these comparisons can help people's self-esteem and egos about things they consider important. *Id.* at 119. Subsequent research has found this to be true, and that these comparisons can also be used to further self-evaluations and improvements. O'Reilly, *Overpaid*, *supra* note 22, at 9-10 (summarizing research on these questions.) O'Reilly concludes that "there is compelling evidence that individuals use social comparisons to evaluate their own performance and abilities as well as to increase self-esteem." *Id.* at 10. He further finds that,

[o]verall, the research on social comparison theory offers strong support for the tendency for individuals in organizations to engage in upward social comparisons with senior managers in order to understand how well they are doing, whether their compensation package is fair, and how equitably they are being treated. When making these comparisons, there is also evidence that people are more sensitive to changes in their relative rather than absolute level of pay.

Id. at 11-12 (summarizing other studies).

82. *Id.* at 4-5. Equity theory, as proposed by Adams, argues that people engage in a mental comparison between themselves and others about their respective inputs and outcomes to make judgments about what is equitable. J. Stacy Adams, *Inequity in Social Exchange*, in 2 ADVANCES IN EXPERIMENTAL SOCIAL PSYCHOLOGY 267, 272-96 (Leonard Berkowitz ed., 1965). When the ratios of inputs and outcomes are comparable, then the outcomes are viewed as fair. O'Reilly, *Overpaid*, *supra* note 22, at 12. Dissimilar ratios create perceptions of unfairness and lead to tensions that must be addressed. *Id.* O'Reilly observes that there are good reasons to expect that these perceptions will affect corporations, including the facts that executive salaries are widely reported and that social comparisons are likely to be made by other workers within the company. *Id.* at 13.

83. O'Reilly, *Overpaid*, *supra* note 22, at 5.

Researchers have used these insights to examine the effects of managerial pay inequities within corporations on worker morale, turnover and pay demands. Using cross-sectional, time-series data from a sample of 120 firms over five years, Professor O'Reilly and his colleagues found that larger pay gaps between corporate CEOs and lower levels of managers were associated with higher rates of managerial turnover.⁸⁴ They concluded that "insofar as underpayment is associated with turnover of senior managers, there are potential costs to the shareholders from turbulence in the senior [management] team"⁸⁵ In other words, big pay gaps can lead to lower morale and higher turnover.

O'Reilly further found that CEO pay inequities affected entire managerial pay scales, with over and underpayment of the CEO associated with over and underpayment of employees at lower organizational levels.⁸⁶ They interpret this finding as indicating that there may be substantial additional costs to shareholders associated with the overpayment of CEOs, while employees will bear the direct costs of underpayment of CEOs.⁸⁷ Shareholders will still indirectly bear these latter costs because under compensation leads to higher managerial turnover.

Several other studies have reached similar conclusions. For example, Pfeffer and Langton studied the effects of wage inequality on job satisfaction, worker productivity, and the ability to work together, in a large sample of university and college faculty.⁸⁸ The authors found that increased wage dispersion led to lower levels of job satisfaction, collaboration, productivity, and recent research output.⁸⁹ The authors further found that when pay was tied to performance, productivity increased, but both job satisfaction and collaborative measures decreased.⁹⁰ Pfeffer and Davis-Blake

84. *Id.* at 28–29.

85. *Id.* at 29.

86. *Id.* at 28.

87. *Id.* at 29.

88. Jeffery Pfeffer & Nancy Langton, *The Effect of Wage Dispersion on Satisfaction, Productivity, and Working Collaboratively: Evidence from College and University Faculty*, 38 ADMIN. SCI. Q. 382 (1993).

89. *Id.* at 403. These authors discuss more detailed results of the relationship between satisfaction and wage dispersion, at pp. 397–402; the relationship between collaboration and wage dispersion at pp. 402–03; and the wage dispersions relationship to research productivity and recent research output at pp. 394–97.

90. *Id.* at 403. The authors also found that individuals react better to larger wage dispersion if the method of allocation was perceived to be fair. *Id.* at 400. They concluded that if firms developed wage scales that were considered fair and legitimate by their

conducted a similar study for college administrators, where they examined the relationship between an individual's place in the college's salary structure, the degree of wage dispersion in that structure and turnover rates among administrators.⁹¹ They determined that an individual's position in the salary structure and the level of dispersion in that structure jointly affect turnover.⁹² They concluded that organizations should weigh the positive effects of big wage differentials on upper level employees against their negative effects on the lower levels.⁹³

Finally, Professors Bloom and Michel's study of the effects of pay dispersion among managers at large publicly traded corporations reaches very similar conclusions.⁹⁴ Using data from two managerial compensation studies, they found that increased levels of pay dispersion in corporate salary structures led to lower levels of job tenure and increased turnover among managers.⁹⁵ Additionally, they found that these effects were "robust across different samples, at different periods of time, at different managerial levels and after accounting for external labor market effects."⁹⁶ They concluded that pay dispersion is of "strategic importance" for corporate decision makers.⁹⁷

employees, such as basing salaries on seniority or performance, most employees would see these allocations as equitable and not react as negatively to wage dispersion. *Id.* at 397.

91. Jeffery Pfeffer & Allison Davis-Blake, *Salary Dispersion, Location in the Salary Distribution, and Turnover Among College Administrators*, 45 INDUS. & LAB. REL. REV. 753 (1992).

92. *Id.* at 762. Thus, a high degree of salary dispersion negatively affects turnover of high earners, but increases effects turnover of low earners. *Id.* The authors also found that lower earners react negatively to a high salary dispersion regardless of the differences in skill, experience, nature of their position, and education. *Id.*

93. *Id.* The authors go on to state that organizations must be careful about engaging in too much wage compression because they may lose some of their highest valued performers. *Id.* Which effect predominates may depend on the type of business that the firm is engaged in. In other words, high degrees of wage dispersion may be value maximizing where the firm's production processes do not depend on team production efforts, but rather on the efforts of a few top performers.

94. Matt Bloom & John G. Michel, *The Relationships Among Organizational Context, Pay Dispersion, and Managerial Turnover* (Univ. of Notre Dame Department of Management, unpublished working paper, 2000) (on file with author).

95. *Id.* at 14.

96. *Id.*

97. *Id.* (citing S. FINKELSTEIN & D. HAMBRICK, *STRATEGIC LEADERSHIP: TOP EXECUTIVES AND THEIR EFFECTS ON ORGANIZATIONS* (West 1996) and B. Gerhart & G.T. Milkovich, *Employee Compensation: Research and Theory*, in 3 *HANDBOOK OF INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY*, 481-569 (M.D. Dunnette & L.M. Hough eds., 2d ed. 1992).

Bloom and Michel's second important finding was that organizational context makes a difference.⁹⁸ Companies that have particular needs for star managers, such as those experiencing highly uncertain environments, may need to offer them higher pay. The result is higher levels of pay dispersion, which in turn causes greater managerial turnover.⁹⁹ Other firms may want to preserve a more collegial, team-oriented atmosphere, preferring low levels of pay dispersion thereby reducing management turnover levels. Bloom and Michel found that companies with high levels of investment opportunities have more dispersed pay structures and higher turnover levels.¹⁰⁰

These studies have significant implications for corporate pay structures. If executive pay is set using a tournament process, these results cast doubt on the efficiency of tournaments as a method of selecting executives at many companies. Sequential elimination tournaments rely upon ever increasing awards to the winners, which may have perverse consequences for firm value if the losers perceive they are being unfairly rewarded compared to the winners.

Tournament losers may leave the firm if the wage gap is too big, resulting in a decline in firm value if the losing managers have valuable, firm-specific human capital. Their retention and future contributions may depend heavily on how they perceive themselves in comparison with their fellow managers. An organization that encourages inequities internally, thereby leading these individuals (and their valuable firm-specific human capital) to look elsewhere may be inefficient. Directors will need to consider their firm's particular needs and determine whether a more dispersed pay structure maximizes shareholder value.

On the one hand, firms that are heavily dependent on keeping a few star employees happy may need to have highly dispersed salary structures. On the other hand, at many companies, a better model of how top management works may be to look at each manager as a member of an interdependent team of workers. The success of this team depends on how they work together. Explicit competition may

98. *Id.* at 4. They discuss several other studies about pay dispersion that have been conducted of the auto racing industry, professional golfers, baseball teams, and others. *Id.* The findings of these studies support the idea that context is very important: more dispersed pay structures will be beneficial in some settings and harmful in others. *Id.* at 4.

99. *Id.* at 6. "[D]ispersed pay structures promote the survival and retention of star (i.e. the most talented) managers, but at the cost of increasing workforce instability and turnover among remaining managers." *Id.* at 5.

100. *Id.* at 15.

be detrimental to the high level of teamwork and cooperation that is necessary for peak performance.¹⁰¹ Research on teamwork and the promotion of cohesive groups indicates that equity and equality are very important.¹⁰² Compensation systems that create big money gaps between the pay levels of upper and lower level managers create the wrong incentives and promote divisiveness and turnover rather than cooperation and longevity among team members. Instead, compensation systems may be better designed to insure effective teamwork if they stress equality and not competition.¹⁰³

Even outside of the top tiers of management, pay equality is important. Workers and middle management, who face heavy demands to work long hours and make sacrifices for the corporation, are well aware of the huge and increasing gap between their pay and that of the few at the top.¹⁰⁴

Directors need to determine if large pay gaps between top managers and other workers adversely affect productivity, turnover, and ultimately the value of the firm. The board should know at what compensation level these effects begin and if they increase at higher levels. For example, boards should know: How big should internal pay gaps be to maximize firm value? What is the appropriate multiple of executive pay to what a line worker or lower level manager makes? Even if we establish a standard, will it need to change over time and as compensation levels increase? These important questions cannot be answered without further research.¹⁰⁵

B. The Uncertain Value of Large Stock Option Grants

Internal pay disparities between top management and other employees are due to a variety of factors, but one of the main culprits are mega-grants of stock options. Directors routinely award CEOs and other top executives large blocks of stock options as part of their compensation packages. In doing so, they focus on the benefits of

101. As discussed in section I.B., one of the negative consequences of tournaments as a method of determining executive advancement is that political maneuvering and sabotage may become the preferred methods to achieve a higher position, rather than merit-based selection. These tactics rarely lead to increases in firm value.

102. O'Reilly, *Overpaid*, *supra* note 22, at 31 (summarizing studies).

103. *Id.*

104. The AFL-CIO has even set up a web site on the internet, Executive PayWatch, to allow anyone to compare their salaries with those of corporate executives at a large number of firms. Executive PayWatch website, at <http://www.aflcio.org/paywatch>.

105. Murphy, *supra* note 8, at 2554. "Understanding the effects of pay inequities in organizations . . . seems a natural direction for future research in executive compensation." *Id.*

such grants and whether this form of pay gives CEOs the correct incentives to maximize firm value.¹⁰⁶ Several studies have shown that there is a positive correlation between the use of incentive pay and firm performance.¹⁰⁷ High CEO incentive pay has been justified on the grounds that CEOs have a huge effect on the value of their company and should be given strong reasons to increase that value.¹⁰⁸

The issue that originally generated the most interest in the economics literature was whether the existing levels of incentive pay were high enough. Some economists have argued that, at present, CEO incentive pay is too weakly tied to corporate performance to bring about optimal increases in firm value.¹⁰⁹ There are two arguments that support their position.¹¹⁰ The first argument rests on the idea of efficient capital markets. In the semi-strong form of the efficient capital markets hypothesis, all publicly available information is claimed to be incorporated into a company's stock price through the research and trading behavior of sophisticated analysts and investors.¹¹¹ If these investors view the adoption of incentive plans as increasing firm value, then they will bid up the price of the firm's stock accordingly.¹¹² Thus, if the stock market views the adoption of

106. MILGROM & ROBERTS, *supra* note 16, at 433. Distributional considerations, such as how shareholders and managers split up the wealth that is created, are irrelevant from an efficiency perspective. *Id.* Economic theory has little to say about the appropriate distribution of wealth. Dollars in the hands of shareholders are valued the same as dollars in the hands of corporate executives. In other words, how much corporate executives are paid is just a transfer payment that does not affect efficiency.

As discussed in section II.A *infra*, this may not be true if the absolute size of payments to executives negatively affects the productivity of other stakeholders in the firm. Thus, poor employee morale or distrust of management may have adverse effects on the value of the firm. *Id.*

107. See, e.g., Barry Gerhard & George T. Milkovich, *Employee Compensation: Research and Theory*, in HANDBOOK OF INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY 481, 508 (M.D. Dunnette & L.M. Hough eds., 1992) (summarizing studies).

108. Murphy, *Top Executives*, *supra* note 22, at 125–32. Executives receive only a small fraction of the gains that they generate for shareholders when the firms they manage perform well.

109. Jensen & Murphy, *CEO Incentives*, *supra* note 22, at 138–39.

110. These arguments rest on the presumptions that firms should be run in order to maximize value and that compensation systems should be designed to incentivize executives to achieve value maximization.

111. Murphy, *supra* note 8, at 2540.

112. *Id.* The Yermack and Brickley studies discussed below can be explained as consistent with the agency cost reduction theory or alternatively with the claim that executives seek to time the adoption of stock option programs and grants with the announcement of favorable information that will boost stock prices. *Id.*

stock option plans favorably, this justifies giving executives explicit incentive pay.¹¹³

Initially, empirical studies found that the stock market reacts favorably to the adoption of incentive plans.¹¹⁴ Examining the effect of the announcement of long-term performance plans, Larcker reported positive and significant abnormal returns at nineteen firms a day after the SEC received the firm's proxy materials containing these disclosures.¹¹⁵ Similarly, Brickley and his associates analyzed the effects on shareholder wealth of the announcement of a number of different executive compensation plans: stock options, stock appreciation rights, restricted stock, phantom stock, and performance plans.¹¹⁶ Although the abnormal returns during the two day announcement period were not significantly different from zero,¹¹⁷ cumulative returns over a period beginning at the board meeting date and ending a day after the SEC "stamp date" were positive (2.4%) and significant.¹¹⁸ No differences were found in stock price reactions across the different types of plans.¹¹⁹

Tehrani and Waagelein, focusing on introductions of short-term compensation plans, also found some evidence of positive returns using a sample of forty-two firms' announcements between 1971 and 1980.¹²⁰ Monthly average abnormal returns were positive and significant the month before and the month of the

113. Note that this argument does not justify giving executives unlimited amounts of explicit incentive pay. Increases in long-term incentive pay are justified only if the stock market views them as increasing the value of the firm. Existing studies of the market's reaction to company stock option plans can be viewed as sanctioning the adoption of limited forms of incentive pay.

114. James Brickley et al., *The Impact of Long-Range Managerial Compensation Plans on Shareholder Wealth*, 7 J. ACCT. & ECON. 115, 128 (1985). A more recent study found that stock prices increase even after the adoption of undisclosed grants of executive stock options. David Yermack, *Good Timing: CEO Stock Option Awards and Company News Announcements*, 52 J. FIN. 449, 454 (1997).

115. David F. Larcker, *The Association Between Performance Plan Adoption and Corporate Capital Investment*, 5 J. ACCT. & ECON. 3, 26 (1983). Firms in Larcker's sample introduced performance plans between 1971 and 1978. *Id.* at 12.

116. Brickley, *supra* note 114, at 120. The data set included 175 proxies containing proposals to introduce or make changes to compensation plans between 1979 and 1982. *Id.* at 121.

117. *Id.* at 124.

118. *Id.* at 125. The "stamp date" refers to the date on which the SEC stamped the filing as received at its offices.

119. *Id.* at 127.

120. Hassan Tehrani & James F. Waagelein, *Market Reaction to Short-Term Executive Compensation Plan Adoption*, 7 J. ACCT. & ECON. 131, 134-35 (1985).

announcement.¹²¹ Cumulative returns were positive and significant for the six-month period prior to the announcement (19.51%) and the ten-month period afterwards (10.5%). Returns between eleven and twenty months afterward were not significantly different from zero.¹²² These positive stock market reactions to the proposal of long-term incentive compensation plans thus lead these economists to conclude that incentive pay is value-increasing for the firm. However, this study looked at bonus plans whose payouts depended on short-term accounting measures and did not include a stock option component.

Two later studies specifically examined the adoption of stock option plans alone. DeFusco, Johnson, and Zorn found that the 107 firms adopting executive stock option plans in the 1978–82 period exhibited a statistically significant average cumulative abnormal return of +0.68%.¹²³ For the fifty-three firms for which both board meeting dates and SEC stamp dates are available, the average cumulative abnormal return was +4.00%, which is also significantly different from zero.¹²⁴

Morgan and Poulsen studied the stock market reaction to proposals of stock option plans during the 1990s.¹²⁵ Using data for the period 1992–95, they reported a significantly positive abnormal stock price reaction for the proposal of executive stock option plans.¹²⁶ In the three-day window surrounding the proxy mail date, the average cumulative abnormal return for the 424 proposals in their sample is +0.52%.¹²⁷ Proposals for adoption of non-employee director plans and employee plans are met with abnormal returns that are not significantly different from zero.¹²⁸

In a more recent paper, Martin and Thomas examined a sample of stock option proposals from the 1998 proxy season and stratified the sample based on participant eligibility, measures of potential

121. *Id.* at 136. Positive and significant returns were found for four months, two months, and one month prior to announcement, the month of announcement, and two and ten months after announcement. *Id.* For some of these (e.g., two months prior and ten months after), announcements of annual earnings may have confounded the results. *Id.* at 138–39.

122. *Id.* at 138.

123. Richard A. DeFusco et al., *The Effect of Executive Stock Option Plans on Stockholders and Bondholders*, 45 J. FIN. 617, 621 (1990).

124. *Id.*

125. Angela G. Morgan & Annette B. Poulsen, *Linking Pay to Performance-Compensation Proposals in the S&P 500*, 62 J. FIN. ECON. 489, 504 (2001).

126. *Id.*

127. *Id.*

128. *Id.*

dilution, plan features, type of plan, and industry classification.¹²⁹ They presented study results that indicated that the stock market does not approve of highly dilutive stock option plans for executives.¹³⁰ These proposals elicited a statistically significant -0.90% average cumulative market adjusted return over the three-day period surrounding the proxy filing date.¹³¹ These results reflected recent dramatic increases in potential dilution caused by the widespread use of option plans and the dramatic increase in executive compensation levels. They indicated that the market has become more aware of the costs of stock option plans, and less impressed with their benefits.¹³²

The second set of arguments favoring stronger incentive pay begin by noting that in leveraged buyouts (“LBOs”) financed by sophisticated firms, the owners of the now privately-held firm give their managers large equity positions in the companies as a means of incentivizing the managers to put forth their best efforts.¹³³ These executives are managing the same assets and resources more successfully after the LBO than they were before the transaction, with the only big difference being that they have greater incentives after receiving large equity shares.¹³⁴ The size of these equity positions dwarfs that provided by executive pay contracts at public corporations. Economists arguing in favor of high levels of incentive pay claim that the big efficiency gains generated by these LBOs are the result of these high incentives and demonstrate that public corporations are not providing their executives large enough option grants.¹³⁵

At public corporations, there is empirical evidence that executive compensation is sensitive to firm performance. An early study by Jensen and Murphy of the relationship between executive

129. THOMAS & MARTIN, *supra* note 7, at 51–58.

130. *Id.* at 73–74.

131. *See id.* at 75–81.

132. *Id.* at 73.

133. MILGROM & ROBERTS, *supra* note 16, at 435.

134. Murphy, *supra* note 8, at 2542. Their pay packages are not the only significant incentives however. The increased debt levels of the company and the greater level of monitoring by the financial sponsors of the LBO may also contribute to any performance improvements. *Id.*

135. For a survey of the various studies, see Murphy, *supra* note 8, at 2542–47. He concludes that this evidence is only suggestive that companies can expect returns from introducing performance-based compensation plans. *Id.* at 2547. A related argument is made by Bill Gross in *The New Math of Ownership*, HARV. BUS. REV., Nov.–Dec. 1998, at 68 (proposing that established businesses spin out promising ideas into new businesses where all employees have significant equity stakes as a means of motivating them to put forth their best efforts).

compensation and corporate stock performance found that managers' pay had a weak positive relationship to performance.¹³⁶ Using data from 1969 to 1983, this study found that CEO compensation changed only \$3.25 for every \$1,000 change in stock value. Most of this change came from the change in the value of executives' stock ownership, with only very small effects from changes in stock options and salary/bonus compensation. Based on these results, Jensen and Murphy claimed that executive pay was not sufficiently sensitive to performance to adequately incentivize managers. They argued that companies should greatly increase the use of restricted stock awards in order to tie CEO wealth to stock value and thereby give executives greater incentives to improve corporate performance.¹³⁷

In a more recent study¹³⁸ using data from 1980 to 1994, Professors Hall and Liebman found that CEO compensation, when defined to include all changes in CEO wealth (direct pay plus changes in the value of CEO stock and stock option holdings), was highly responsive to company performance.¹³⁹ They found that the value of stock and stock options held by CEOs were much more sensitive to changes in the company's performance than were the salary and bonus components of CEO compensation.¹⁴⁰ Thus, for example, while the median CEO in companies performing in the bottom tenth percentile of a group of comparable companies lose \$435,000 on their stock and stock option plans, they can increase their wealth by \$8.6 million if their company's performance improves to the ninetieth percentile.¹⁴¹ This gives the executive strong incentives to improve company performance.

136. Jensen & Murphy, *Performance Pay*, *supra* note 22.

137. MILGROM & ROBERTS, *supra* note 16, at 440.

138. Hall & Liebman, *supra* note 10, at 665–66.

139. Hall and Liebman's study was made, at least in part, in response to Jensen and Murphy's paper. Hall and Liebman argue that Jensen and Murphy's study is outdated because they were relying on data from 1969–1983, before stock options became a common form of compensation. *Id.* at 655. They also point out that by only focusing on the change in CEO wealth relative to the changes in the value of the firm, Jensen and Murphy's study makes pay-performance sensitivity appear small because of the fact that when large companies grow their value is often increased by billions of dollars and, as a result, any increase in compensation that one man receives will pale in comparison. *Id.* at 656 (noting that focusing on the change in CEO wealth relative to the change in firm value is misleading because the denominator, change in firm value, can be very large).

140. *Id.* at 682.

141. *Id.* at 685.

Neither of these studies resolves the fundamental question of how well executive incentives work.¹⁴² Giving away more of the company's profits to highly compensated executives is only worthwhile if the resulting improvement in performance offsets the costs of the awards. As noted before, this may not be the case with mega-grants of stock options.¹⁴³ One study of a small number of companies has found that total returns to shareholders of many companies with large stock option programs trail the performance of the S&P 500 index.¹⁴⁴

A more comprehensive study by Habib and Ljungqvist found that firms with higher levels of CEO stock ownership have higher Tobin's Q's.¹⁴⁵ They believe that this supports the hypothesis that CEO's maximize firm value when they are the residual claimants in a company.¹⁴⁶ Yet, they further concluded that CEOs hold too many stock options, and that the marginal benefit of these excess options is less than the cost to shareholders.¹⁴⁷ With the exception of this study, however, there is remarkably little empirical evidence on this issue.¹⁴⁸

Psychologists almost universally agree that human performance improves with increasing incentives.¹⁴⁹ The proposition that needs to be tested is to what extent do *changes* in incentives lead to improvements in subsequent performance.¹⁵⁰ One study of thousands

142. MILGROM & ROBERTS, *supra* note 16, at 441. There is a third line of research that examines the relationship between managerial stockholdings and company performance indirectly. These studies use Tobin's Q-Ratio, the market value of the firm divided by the replacement cost of its assets, as a measure of company performance. See Murphy, *supra* note 8, at 2541. These studies, summarized by Murphy, have produced mixed results. *Id.*

143. A mega-grant of stock options is an award that is initially valued at more than \$10 million. Rachel Emma Silverman, *The Going Rate: Mega Options*, WALL ST. J., Nov. 9, 1999, at B18.

144. Joann S. Lublin & Leslie Scism, *Stock Options at Firms Irk Some Investors*, WALL ST. J., Jan. 12, 1998, at B1 (reporting on study by Jack Ciesielski of the Analyst Accounting Observer).

145. Michel A. Habib & Alexander P. Ljungqvist, *Firm Value and Managerial Incentives* (unpublished working paper, 2000).

146. *Id.*

147. *Id.*

148. Murphy, *supra* note 8, at 2542-47.

149. See, e.g., J. Stacy Adams & Patricia R. Jacobsen, *Effects of Wage Inequities on Work Quality*, 69 J. ABNORMAL & SOC. PSYCH. 19, 19 (1964).

150. One of the fundamental problems of psychophysics is discovering simple equations that describe how the intensity of stimuli are related to people's impressions. GEORGE A. GESCHIEDER, *PSYCHOPHYSICS: METHOD, THEORY AND APPLICATION* 215 (2d ed. 1985). One of the first attempts to formulate such a law was undertaken by Daniel Bernoulli in 1738. *Id.* Bernoulli studied the way in which people value money. *Id.* He proposed that the utility of money increases at a decreasing rate as the amount of money that a person has grows. *Id.* He proposed that this relationship was described by a

of executives at 250 large American corporations found that raising the sensitivity of changes in salaries and bonuses to current corporate performance has a positive and statistically significant effect on future performance.¹⁵¹ The same study found similar correlations between increases in pay sensitivity to current rates of return to shareholders and resultant increases in shareholder return in the next year. However, this study did not examine the effects of long-term incentive pay plans. No other studies have been conducted on this question.

Risk may also play an important role in determining whether offering executives large amounts of incentive pay leads to improved firm performance. Higher levels of incentive pay by firms facing significant business risks may lead executives to withhold their efforts or take actions to reduce their risk exposure, thereby hurting firm performance.¹⁵² A recent study by Bloom and Milkovich found that for firms facing riskier business environments, the "greater use of incentive pay may be associated with lower firm performance."¹⁵³ They concluded that higher risk firms should increase base pay levels and reduce incentive pay.¹⁵⁴

More research needs to be done to demonstrate that long-term incentive pay plans create net benefits for corporations. The role of risk and how its effects vary across companies also needs to be better understood. Given the substantial costs of incentive pay plans, and their uncertain benefits, corporate boards of directors should investigate these questions carefully before authorizing mega-grants of stock options.

In the interim, directors should give fresh consideration to using restricted stock as an alternative to stock options. Restricted stock awards have the virtue of giving executives exactly the same incentives as all shareholders because they give executives exactly the same instrument as other shareholders: stock. If the restrictions on

logarithmic function. *Id.* More recent experiments have shown that the actual relationship is a power function where money's utility increases as a function of its amount raised to the .45 power approximately. *Id.*

151. MILGROM & ROBERTS, *supra* note 16, at 442 (citing John M. Abowd, *Does Performance-Based Managerial Compensation Affect Corporate Performance?*, 43 *INDUS. & LAB. REL. REV.* 52S, 52S-73S (1990)); Murphy, *supra* note 8, at 2539 (also citing the Abowd study).

152. Matthew C. Bloom & George T. Milkovich, *The Relationship Between Risk, Incentive Pay, and Organizational Performance*, *ACAD. MGMT. J.* (forthcoming) (manuscript on file with author).

153. *Id.* at 20.

154. *Id.* at 22.

the shares are sufficiently long term, then this would eliminate many of the distortions discussed above because managers would have to hold their shares for the long-term.

III. Should Boards Consider the Costs of Internal Pay Differentials?

Directors need to be better informed about the value of pay-for-performance compensation systems. The duty of care requires boards to have a reasonable basis for concluding that large incentive pay awards are beneficial to the firm.¹⁵⁵ The Delaware Supreme Court has stated that directors must consider all material information about executive compensation agreements that is reasonably available to them in order to satisfy their duty of care.¹⁵⁶

To satisfy this fiduciary duty, directors should determine whether the costs of issuing mega-grants of stock options, or other forms of incentive compensation, are outweighed by any resulting improvements to corporate performance. Boards could either make this decision relying on advice from internal corporate employees or outside experts.¹⁵⁷ However, they would need a reasonable basis for

155. The duty of care requires boards to be reasonably informed about whether their actions are in the best interests of the corporation. *Smith v. Van Gorkom*, 488 A.2d 858, 873 (Del. 1985); *see also In re Caremark Int'l Inc. Derivative Litig.*, 698 A.2d 959, 971 (Del. Ch. 1996) (applying duty of care analysis in dicta to find board may have duty to implement internal monitoring systems in certain areas).

156. *Brehm v. Eisner*, 746 A.2d 244, 259 (Del. 2000). In that case, the Court found that information relating to large payouts under a severance contract was material information that was reasonably available to a board of directors where their compensation consultant could have calculated these amounts and did not do so. *Id.* at 259–60. For an extensive discussion of the implications of this decision for the standards of judicial review of executive compensation decisions, see Randall S. Thomas & Kenneth J. Martin, *Litigating Challenges to Executive Pay: An Exercise in Futility?*, 79 WASH. U. L.Q. 569, 596–99 (2001).

157. If the compensation committee directors did not have the necessary expertise to make this decision themselves they would need to seek expert advice about it. *Van Gorkum*, 488 A.2d at 876–77 (concluding that directors must be informed about the value of the corporation when they make decision to sell the company; they may obtain this information through the use of outside experts or internal personnel, provided that they have a reasonable basis to conclude that the experts are qualified to provide this advice).

In some circumstances, compensation consultants might be able to provide this expertise. Charles M. Yablon, *Overcompensating: The Corporate Lawyer and Executive Pay*, 92 COLUM. L. REV. 1867, 1877–81 (1992) (book review) (noting that compensation experts are qualified to compare executive compensation in similar companies and to give boards advice about appropriate compensation levels). However, given the complete lack of research in the area, compensation consultants would not be able to tell a board whether incentive pay packages with substantial option components were cost-justified from shareholders' perspective.

concluding that any expert was qualified to give an opinion on the matter. Given our current state of ignorance about the value of stock option plans, this requirement would certainly make directors more careful about awarding mega-grants of stock options to executives. It would also provide stimulus for further research on this critical question.¹⁵⁸

When challenged, boards generally point to the opinions of their compensation consultants that their executive compensation packages are appropriate.¹⁵⁹ These consultants are normally well-informed about the relative pay practices of the firm within its industrial sector. They will have access to highly-detailed studies of the executive pay systems employed by comparable firms that compete with the firm they are advising. Although this information may be very useful in determining the opportunity costs of management, it does not address the key question before the board: what level of executive compensation will maximize the value of the firm?¹⁶⁰ Without this information, directors cannot claim to be making informed determinations about the impact of executive pay levels on their firms and shareholders.

Institutional investors and other large shareholders will need to force boards to face these tough questions. They should demand that directors justify executive pay packages as value maximizing for the firm. These stakeholders have the power to insist on an accounting of the costs of greater degrees of pay dispersion. This could include estimates of the increased level of employee turnover, decreased morale, and losses in worker productivity. They can also push boards to quantify the incentive benefits of pay-for-performance compensation packages so that these can be weighed against their dilutive impact on shareholders' equity and voting rights.

158. Numerous authors have noted the near complete absence of any empirical research on the net value to shareholders of incentive compensation awards to executives. See, e.g., MILGROM & ROBERTS, *supra* note 16; Murphy, *supra* note 8.

159. *In re Walt Disney Co. Shareholders Derivative Litig.*, 731 A.2d 342, 361-62 (Del. Ch. 1998).

160. Even if boards ignore the effects of their decisions on non-shareholder constituencies, this remains an important question because it affects the company's stock price. In a related development, the Airline Pilots Association is seeking shareholder support for a proposal that asks the directors of Delta Airlines to measure employee satisfaction in calculating top executives' performance awards. Joann S. Lublin, *The Going Rate*, WALL ST. J., Sept. 14, 1999, at B18. UAL Corp., the parent company of United Airlines, has already accepted a similar request and will tie senior management's bonuses partly to employee happiness. *Id.*

Shareholders should also ask the board to justify the cost of incentive pay packages awarded to management. Giving executives options to buy ten percent of the company's stock is not costless to investors, despite the accounting treatment for stock options.¹⁶¹ If these options raise the value of the firm by incentivizing managers to work harder, stakeholders should ask boards to provide evidence to support this claim.

The duty of care should require directors to be informed about the effect of internal pay differentials on firm value. Boards need to consider the negative consequences for the firm as a whole if one group is perceived as being unfairly rewarded. Directors also need to determine if high executive pay adversely affects other workers' productivity, turnover, and ultimately if these factors adversely impact the value of the firm. The board should know at what level of compensation these effects begin and if they increase at higher levels. There has been almost no research on these questions. However, the studies discussed above point toward placing a ceiling on executive compensation because of these effects.

Conclusion

The Enron disaster has had many negative impacts on our country, but it has stimulated a reappraisal of executive pay practices in the United States. Corporate directors should care about internal corporate pay inequalities because they may directly affect the value of their firms. They should also consider whether large stock option grants are a value-increasing form of compensation; using restricted stock awards may have more beneficial effects at the same cost to the company.

The impact of internal pay differentials and stock options on firm value are important pieces of material information that boards should have before them when making decisions about the appropriate levels of executive pay. A director's fiduciary duty of care should require her to consider such material information before awarding hundreds of millions of dollars of shareholder money to corporate officers. To date, boards have been ill-informed on these questions.

Researchers need to study these effects, too. Little work has been done on the net benefits of stock option awards. Long-term studies of the impact of incentive compensation need to be conducted

161. Calvin H. Johnson, *Stealing the Company with Free Stock Options: The Furor over Accounting Standards*, 65 TAX NOTES 355, 356 (1994).

in order to quantify the benefits of stock option plans. Similarly, more research needs to be conducted on the effects of internal pay differentials on firm value. Such research would be most useful to directors if it could establish some guidelines for appropriate pay differentials at different types of companies. Without further work on these issues, corporate boards will continue to make uninformed and very expensive guesses about how to pay their executives.
