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Lucian Arye Bebchuk and Jesse M. Fried

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## Executive Compensation as an Agency Problem

Lucian Arye Bebchuk\* and Jesse M. Fried\*\*

### Abstract

This paper provides an overview of the main theoretical elements and empirical underpinnings of a “managerial power” approach to executive compensation. The managerial power approach recognizes that boards of publicly traded companies with dispersed ownership do not bargain at arms’ length with managers, and that managers are able to influence their own pay arrangements. It thus views executive compensation not only as an instrument for addressing the agency problem between managers and shareholders, but also as part of the problem itself. We show that the managerial power approach can help explain many features of the executive compensation landscape, including ones that researchers have long viewed as puzzling. We explain that managerial influence produces efficiency costs because managers’ seeking and camouflaging of rents produces inefficient arrangements that result in weak or even perverse incentives.

Keywords: Corporate governance, managers, shareholders, boards, directors, executive compensation, stock options, principal-agent problem, agency costs, rent extraction, golden parachutes, executive loans, compensation consultants.

JEL classification: D23, G32, G34, G38, J33, J44, K22, M14.

\* William J. Friedman Professor of Law, Economics, and Finance, Harvard Law School, and Research Associate, National Bureau of Economic Research. E-mail: bebchuk@law.harvard.edu.

\*\* Professor of Law, Boalt Hall School of Law, University of California at Berkeley. E-mail: friedj@law.berkeley.edu.

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Executive compensation has long attracted a great deal of attention from financial economists. Indeed, the increase in academic papers on the subject of CEO compensation during the 1990's seems to have outpaced even the remarkable increase in total CEO pay itself during this period (Murphy (1998)). Much research has focused on how executive compensation schemes can help alleviate the agency problem in publicly traded companies. To adequately understand the landscape of executive compensation, however, it is necessary to recognize that compensation schemes are also partly a product of this same agency problem.

## I. ALTERNATIVE APPROACHES TO EXECUTIVE COMPENSATION

Our focus in this paper is on publicly traded companies without a controlling shareholder. When ownership and management are separated in this way, managers might have a substantial degree of power. This recognition goes back, of course, to Berle and Means (1933) who observed that “[D]irectors, while in office, have almost complete discretion in management” (p. 139). Since Jensen and Meckling (1976), the problem of managerial power and discretion has been analyzed in modern finance as an “agency problem.”

Managers may use their discretion to benefit their private interests in a variety of ways (Shleifer and Vishny (1997)). For example, managers may engage in empire building (Jensen, (1974), Williamson (1964)). They may, as Jensen (1986) suggests, fail to distribute excess cash when the firm does not have profitable investment opportunities. Managers also may entrench themselves in their positions, making it difficult to oust them when they perform poorly (Shleifer and Vishny (1989)). Any discussion of executive compensation must proceed against the background of the fundamental agency problem afflicting management decision-making. There are two different views, however, on how the agency problem and executive compensation might be linked.

Among financial economists, the dominant approach to the study of executive compensation views these pay arrangements as a (partial) *remedy* to the agency problem. Under this approach, which we label “the optimal contracting approach,” compensation schemes are assumed to be designed by boards seeking to provide managers with efficient incentives to maximize shareholder value. Financial economists have done substantial work within this optimal contracting model in an effort to understand executive compensation practices. Recent surveys of this work on executive compensation from an optimal contracting perspective include Murphy (1999) and Core, Guay, and Larcker (2001). To researchers working within

the optimal contracting model, the main flaw with existing practices seems to be that, due to political limitations on how generously executives can be treated, compensation schemes are not sufficiently high powered (Jensen and Murphy (1990)).

Another approach to studying executive compensation, which we label the “managerial power approach,” focuses on a different link between the agency problem and executive compensation. Under this approach, executive compensation is viewed not only as a potential instrument for addressing agency problems – but also as *part* of the agency problem itself. As a number of researchers have recognized, some features of pay arrangements seem to reflect managerial rent seeking rather than the provision of efficient incentives (e.g., Blanchard, Lopez-de-Silanes, and Shleifer, (1994), Yermack (1997), and Bertrand and Mullainathan (2001)). Building on this research, we seek to develop a full account of how managerial influence shapes the executive compensation landscape in a forthcoming book (Bebchuk and Fried (2004)) that builds substantially on a long article written jointly with David Walker (Bebchuk, Fried, and Walker (2002)).

Drawing on this work, we argue below that managerial power and rent extraction are likely to have an important influence on the design of compensation arrangements. Indeed, as an empirical matter, the managerial power approach can shed light on many significant features of the executive compensation landscape that have long been seen as puzzling by researchers working within the optimal contracting model. We also explain that managerial influence on pay might impose substantial costs on shareholders – beyond the excess pay executives receive – by diluting and distorting managers’ incentives and thereby hurting corporate performance.

Although the managerial power approach is conceptually quite different from the optimal contracting approach, the former is not proposed as a complete replacement for the latter. Compensation arrangements might be shaped both by market forces that push toward value-maximizing arrangements, and by the influence of managerial power, leading to departures from these arrangements in directions favorable to managers. The managerial power approach simply claims that these departures from value-maximizing arrangements are substantial and that compensation practices thus cannot be adequately explained by optimal contracting alone.

## II. THE LIMITATIONS OF OPTIMAL CONTRACTING

The optimal contracting view recognizes that managers suffer from an agency problem and do not automatically seek to maximize shareholder value. Thus, providing managers with adequate incentives is important. Under the optimal contracting view, the board, working in shareholders' interest, attempts to cost-effectively provide managers such incentives through their compensation packages. Optimal compensation contracts could result either from effective arm's length bargaining between the board and the executives, or from market constraints that induce players to adopt such contracts even in the absence of arm's length bargaining. However, neither of these forces can be expected to constrain effectively departures from arm's length outcomes.<sup>1</sup>

Just as there is no reason to presume that managers automatically seek to maximize shareholder value, there is no reason to expect *a priori* that directors will either. Indeed, an analysis of directors' incentives and circumstances suggests that directors' behavior is also subject to an agency problem. The director agency problem undermines the board's ability to effectively address the agency problems in the relationship between managers and shareholders.

Directors have an incentive to be re-appointed to the board. Average director compensation in the 200 largest US corporations in 2001 was \$152,626 (Pearl Meyers and Partners (2002)). In the notorious Enron case, the directors were each paid \$380,000 in 2001 (Abelson (2001)). Besides an attractive salary, a directorship is also likely to provide prestige and valuable business and social connections. Thus, directors often have an incentive to favor the CEO because of the important role CEO's play in re-nominating directors to the board.

To be sure, in a world in which shareholders selected individual directors, directors might have an incentive to develop reputations as shareholder-serving. However, because board elections are by slate and dissidents putting forward their own director slate confront substantial impediments, such challenges are exceedingly rare (Bebchuk and Kahan (1990)). Typically, the director slate proposed by management is the only one offered.

The key to a board position is thus being on the company's slate. Because the CEO's influence over the board gives her significant influence over the nomination process, directors have an incentive to "go along" with the CEO's pay arrangement, a matter dear to the CEO's heart, at least as long as the compensation package

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<sup>1</sup> Shareholders could try to challenge undesirable pay arrangements in court. However, corporate law rules effectively prevent courts from reviewing compensation decisions. (Bebchuk, Fried, and Walker (2002), at 779-781).

remains within the range of what can be defended and justified. In addition, because being on the company's slate is the key to being appointed, developing a reputation for not going along with CEO compensation would hurt rather than help a director's chances of being appointed to other companies' boards. Yet another reason to favor the CEO is that the CEO can affect directors' compensation and perks

Directors typically have only nominal equity interests in the firm (Baker, Jensen, and Murphy (1988), Core, Holthausen, and Larcker (1999)). Even if a director did not place much value on a board seat, he would still have little personal motivation to fight the CEO, or other directors who wish to please the CEO, on compensation matters. Finally, directors usually lack easy access to the independent information and advice on compensation practices that would be necessary to do so.

Similarly, market forces are not sufficiently strong and fine-tuned to assure optimal contracting outcomes. In theory, several different markets could impose *some* constraints on what directors will agree to and what managers will ask them to approve -- including the market for control, the market for capital, and the labor market for executives. An analysis of these markets, however, indicates that the constraints they impose are far from tight and permit substantial deviations from optimal contracting (Bebchuk, Fried, and Walker (2002)).

Consider, for example, the market for corporate control - the threat of a takeover. Firms frequently have substantial defenses against takeovers. For example, a majority of companies have a staggered board, which prevents a hostile acquirer from gaining control for at least a year and often enables incumbent managers to block hostile bids that are attractive to shareholders (Bebchuk, Coates, and Subramanian (2002)). To overcome incumbent opposition, a hostile bidder must be prepared to pay a substantial premium; during the second half of the 1990's, the average premium in hostile acquisitions was 40% (Bebchuk, Coates, and Subramanian (2002)). The market for corporate control thus leaves managers with considerable slack and ability to extract private benefits. The disciplinary force of the market for corporate control is further weakened by the prevalence of golden parachute provisions, as well as acquisition-related benefits that target managers often receive when agreeing to an acquisition (Bebchuk and Fried (2004)). To be sure, the market for control might impose some costs on managers who are especially aggressive in extracting rents; we later note evidence that CEO's of firms with stronger takeover protection get pay packages that are both larger and less performance sensitive. The important point is that the market for corporate control fails to impose tight constraints on executive compensation and permits substantial deviations from optimal contracting outcomes.

### III. THE MANAGERIAL POWER APPROACH

The very reasons for questioning the ability of optimal contracting to adequately explain compensation practices also suggest that executives have substantial influence over their own pay. These reasons also suggest that the more power managers have, the greater their ability to extract rents. There are limits to what directors will be willing to accept and what markets will permit, but these constraints do not prevent managers from obtaining arrangements that are more favorable than those they would obtain by bargaining at arm's length.

One important building block of the managerial power approach is that of "outrage" costs and constraints. The tightness of the constraints managers and directors confront depends, in part, on how much "outrage" the proposed arrangement is expected to generate among relevant outsiders. Outrage might cause embarrassment or reputational harm to directors and managers, and it might reduce the willingness of shareholders to support incumbents in proxy contests or takeover bids. The more outrage a compensation arrangement is expected to generate, the more reluctant directors will be to approve the arrangement, and the more hesitant managers will be to propose it in the first instance. Thus, whether a compensation arrangement that is favorable to executives but suboptimal for shareholders is adopted will depend on how it is perceived by outsiders.

There is evidence that the design of compensation arrangements is indeed influenced by how they are perceived by outsiders. Johnson, Porter, and Shackell (1997) find that the CEO's of firms receiving negative coverage of their compensation arrangements in the media during 1992-94 received relatively small increases in compensation during subsequent years and that pay-performance sensitivity was increased. Thomas and Martin (1999) find that, during the 1990's, CEO's of firms that were the target of shareholder resolutions criticizing executive pay had their annual compensation reduced over the following two years by \$2.7 million.

The potential significance of whether compensation is perceived as justified and of outrage costs explains the importance of yet another building block of the managerial power approach - "camouflage." To avoid or minimize outrage resulting from outsiders' recognition of the presence of rent extraction, managers have an incentive to obscure and try to legitimize—or, more generally, to camouflage—their extraction of rents. The desire to camouflage might lead to the adoption of inefficient compensation structures that hurt managerial incentives and firm performance. This concept of camouflage turns out to be quite useful in

explaining many of the patterns and puzzles found in the executive compensation landscape.

The importance of how compensation arrangements are perceived indicates that, in the executive compensation area, the extent to which disclosures are transparent matters. Financial economists often focus on the role of disclosure in getting information incorporated into market pricing. For information to be reflected in stock prices, it is usually sufficient that it be known and fully understood by a limited number of market professionals. In the executive compensation context, however, the ability of plan designers to choose arrangements that are tilted in favor of managers depends on how these arrangements are perceived by a wide group of outsiders. As a result, transparency and salience can have a significant effect.

#### IV. POWER AND CAMOUFLAGE AT WORK

We illustrate below the potential value of the managerial power approach by discussing four patterns and practices that can be at least partly explained by power and camouflage: the relationship between power and pay; the use of compensation consultants; executive loans; and golden good-bye payments to departing executives.

##### *A. Power-Pay Relationships*

The managerial power approach predicts that pay will be higher and/or less sensitive to performance in firms in which managers have relatively more power. Other things being equal, managers would tend to have more power when: (i) the board is relatively weak or ineffectual; (ii) there is no large outside shareholder; (iii) there are fewer institutional shareholders; or (iv) the managers are protected by antitakeover arrangements. There is evidence indicating that each of these factors affects pay arrangements in the way predicted by the managerial power approach.

Executive compensation is higher *when the board is relatively weak or ineffectual vis-à-vis the CEO*. Core, Holthausen, and Larcker (1999), examining 205 large public firms during the years 1982-84, find that CEO compensation is higher under the following conditions: when the board is large, making it more difficult for the directors to organize in opposition to the CEO; when more of the outside directors have been appointed by the CEO, and thus might feel a sense of gratitude or obligation to the CEO; and when outside directors serve on three or more boards, and thus are likely to be relatively distracted. Their findings imply that if the CEO added another member to a 12-person board his compensation would be 8% higher.

Also, CEO pay is 20-40% higher if the CEO is the chairman of the board ((Cyert, Kang, and Kumar (2002), Core, Holthausen, and Larcker (1999)). Finally, CEO pay is negatively related to the share ownership of the board's compensation committee; doubling the compensation committee ownership reduces non-salary compensation by 4-5% (Cyert, Kang, and Kumar (2002)).

The *presence of a large outside shareholder* is likely to result in closer monitoring (Shleifer and Vishny (1986)) and thus can be expected to reduce managers' influence over their compensation. Consistent with this observation, Cyert, Kang, and Kumar (2002) find a negative relationship between the equity ownership of the largest shareholder and the amount of CEO compensation; doubling the percentage ownership of the outside shareholder reduces non-salary compensation by 12-14%. Bertrand and Mullainathan (2000) find that CEO's in firms that lacked a 5 percent (or larger) external shareholder tended to receive more "luck-based" pay - pay associated with profit increases that are entirely generated by external factors (e.g., changes in oil prices and exchange rates) rather than by managers' efforts. They also find that, in firms that lack large external shareholders, the cash compensation of CEO's is reduced less when their options-based compensation is increased. Relatedly, in an examination of S&P 500 firms during the period 1992-97, Benz, Kucher, and Stutzer (2001) find that a higher concentration of shareholders results in a significantly reduced number of options granted to top executives.

A *larger concentration of institutional shareholders* might result in greater monitoring and scrutiny of the CEO and the board. Examining CEO pay in almost 2000 firms during the period 1991-1997, Hartzell and Starks (2002) find that the more concentrated institutional ownership is, the lower is executive compensation. They also find that a larger institutional presence results in more performance-sensitive compensation. Examining CEO compensation in the 200 largest companies during 1990-1994, David, Kochar and Levitas (1998) find that the effect of institutional shareholders on CEO pay depends on the types of relationships they have with the firm. They divide institutional shareholders into: (1) those that have no other business relationship with the firm and are thus concerned only with the firm's share value ("pressure-resistant" institutions); and (2) those that have other business relationships with the firm (e.g., managing a pension fund) and are thus vulnerable to management pressure ("pressure-sensitive" institutions). As the managerial power approach predicts, CEO pay is negatively correlated with the presence of pressure-resistant institutional investors and positively correlated with the presence of pressure-sensitive ones.

The adoption of *antitakeover provisions* makes CEO's less vulnerable to a hostile takeover. Borokhovich, Brunarski and Parrino (1997), examining 129 firms

that adopted anti-takeover provisions (such as a supermajority rule) during the period 1979-1987, find that CEO's of firms adopting such provisions enjoy above-market compensation before adoption of the anti-takeover provisions and that adoption of these provisions increases their excess compensation significantly. This pattern is not readily explainable by optimal contracting; indeed, if managers' jobs are more secure, shareholders should be able to pay managers a lower risk premium (Agrawal and Knoeber (1998)). In another study, Cheng, Nagar, and Rajan (2001) find that CEO's of Forbes 500 firms that became protected by new state anti-takeover legislation enacted during the period 1984-1991 reduced their holdings of shares by an average of 15%, apparently because the shares were not as necessary for maintaining control. Optimal contracting might predict that a CEO protected by anti-takeover legislation would be required to buy more shares to restore her incentive to increase shareholder value.

### *B. Compensation Consultants*

U.S. public companies typically employ outside consultants to provide input into the executive compensation process (Bizjack, Lemmon, and Naveen (2000)). The consultants conduct compensation surveys and provide access to industry pay data. Their use can be explained within the optimal-contracting framework on grounds that they supply useful information and contribute expertise on the design of compensation packages. But although compensation consultants can sometimes play a useful role, they also can play a role in camouflaging rents. The incentives of compensation consultants - and the evidence regarding their use - suggest that these consultants are often used to justify executive pay rather than to optimize it.

Compensation consultants have strong incentives to use their discretion to help the CEO. Even if the CEO is not formally involved in the selection of the compensation consultant, the consultant is usually hired by the firm's human resources department, which is subordinate to the CEO. Providing advice that hurts the CEO's pocketbook is hardly a way to enhance the consultant's chances of being hired in the future by this firm as well as by other firms. Moreover, executive pay specialists often work for consulting firms that have other, larger assignments with the hiring company, which further distorts their incentives (Crystal (1991)).

Pay consultants favor the CEO by providing the compensation data that are most useful for justifying a high level of pay. For example, when firms do well, consultants push for high compensation, arguing that pay should reflect performance and should be higher than the average in the industry -- and certainly higher than that of CEO's who are doing poorly. In contrast, when firms do poorly,

the consultants look not to performance but rather to peer group pay norms to argue that the salary of the CEO should be higher to reflect prevailing salaries (Gillan (2001)).

After the compensation consultant has collected the “relevant” comparative data, which are likely to be tilted in favor of the CEO, the board generally sets pay equal to or higher than the median CEO pay in the comparison group. Reviewing the reports of compensation committees in 100 large companies, Bizjack, Lemmon, and Naveen (2000) report that 96 used peer groups in determining management compensation, and that a large majority of firms that use peer groups set compensation at or above the fiftieth percentile of the peer group. The combination of helpful compensation consultants and sympathetic boards is in part responsible for the widely recognized “ratcheting up” of executive salaries (Murphy (1999), p. 2525).

After the compensation package is set, firms use compensation consultants and their reports to justify executive compensation to shareholders. Examining S&P 500 companies during the period 1987-1992, Wade, Porac and Pollack (1997) find that companies that pay their CEO’s larger base salaries, and firms with more concentrated and active outside ownership, are more likely to cite the use of surveys and consultants in justifying executive pay in their proxy reports to shareholders. This study also finds that, when accounting returns are high, firms emphasize the accounting returns and downplay market returns. These findings are also consistent with the view that executives use compensation consultants to generate and justify higher compensation.

### *C. Loans to Executives*

Another practice that has been used to camouflage rents is firm loans to top executives on very favorable terms. While the Sarbanes-Oxley Act of 2002 now prohibits executive loans, prior to the Act’s adoption more than 75 percent of the 1,500 largest U.S. firms used such loans (King (2002)). It is not readily apparent what efficiency benefits are produced by having firms (rather than banks) provide loans to executives, or by providing compensation in the form of favorable interest rates (rather than cash or other forms of compensation). But loans can clearly play a role in helping to camouflage compensation.

To begin with, the implicit compensation provided by below-market rate loans often does not appear in the compensation disclosure section of the firm’s annual filing. The SEC ruled that firms must disclose in the category of “other annual compensation” the difference between the interest actually paid on executive

loans and “the market rate.” However, the SEC did not define “market rate,” and firms have often interpreted the term in a manner that enabled them to exclude these benefits from the compensation tables.

For example, WorldCom did not report in its filed compensation tables any implicit income to CEO Bernard Ebbers from the over \$400 million of loans he received from WorldCom at an interest rate of 2.15 percent on the grounds that 2.15 percent was the “market rate” at which WorldCom was borrowing under one of its credit facilities.<sup>2</sup> However, 2.15 percent was far below the more than 5 percent rate that Ebbers would have had to pay in the market to borrow funds at the time. To be sure, the existence and terms of the loans (although not an estimate of the conferred benefits) must be noted elsewhere in the firm’s public filings as a related-party transaction. However, this disclosure is much less salient because outsiders interested in executives’ compensation commonly focus on the compensation disclosures. Indeed, in Ebbers’s case, despite the large financial benefit provided by the extremely low interest rate on his loan, the loan received no media attention and no outside scrutiny until WorldCom became involved in an accounting scandal.

A second manner in which loans can provide camouflage is through the practice of loan forgiveness. A firm that has provided an executive with a loan to buy a large amount of stock will often not demand full repayment of the loan if the stock value falls below the amount due on the loan. As a result, the arrangement is similar (but, it can be shown, usually less tax-efficient) to granting the executive an option to buy shares at a price equal to the amount owed on the loan. However, option grants must be reported in the compensation tables in the firm’s annual filing. In contrast, when using a loan that will be forgiven if the stock price drops, the firm does not need to include the option value of the arrangement in the compensation tables in the year the loan is made. If the stock price falls, the loan will often be forgiven at the time the executive leaves the company, when any resulting outrage is likely to have little impact on the executive personally. For example, George Shaheen, the Webvan CEO who resigned shortly before Webvan went bankrupt, had a \$6.7 million loan forgiven in exchange for \$150,000 of Webvan stock (Lublin (2002)).

Finally, loans enabled managers to camouflage their unloading of shares. In recent years, hundreds of executives have made stock-for-loan exchanges under which loans were repaid with company stock (Leonhardt (2002)). When executives sold stock in the open market, they had to report the sale by the 10th day of the following month. But when they sold stock back to the company, they had to report

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<sup>2</sup> Our account of this example, as well as of other examples below, is based on SEC disclosure documents we studied for our forthcoming book.

such transactions only within 45 days after the end of the fiscal year in which the exchange took place, thus enabling insiders to hide their stock sales for up to a year. For example, in 2001, Tyco's CEO Dennis Kozlowski returned \$70 million of shares of stock to the company, partly to repay loans, even as he continued to say publicly that he rarely sold his Tyco shares.

#### *D Golden Goodbyes*

A "golden goodbye" refers to the practice of the board giving departing CEO's payments and benefits that are gratuitous -- not required under the terms of the CEO's compensation contract. Such golden goodbyes are common even when CEO's perform so poorly that the board feels compelled to push them out.

Compensation contracts usually provide executives with generous severance arrangements even when they depart following very dismal performance. Such "soft landing" provisions provide executives with insurance against being fired due to poor performance. It is far from clear that these arrangements reflect optimal contracting; after all, such provisions reduce the very difference in managerial payoffs between good and poor performance that firms spend so much trying to create. Our focus here, however, is on payments that go beyond the generous severance arrangements that are contractually specified.

For example, when Mattel CEO Jill Barad resigned under fire, the board forgave a \$4.2 million loan, gave her an additional \$3.3 million in cash to cover the taxes for forgiveness of another loan, and allowed her unvested options to automatically vest and remain exercisable until the end of their original terms. These gratuitous benefits were in addition to the considerable benefits that she received under her employment agreement, which included a termination payment of \$26.4 million and a stream of retirement benefits exceeding \$700,000 per year.

It is hard to reconcile such gratuitous payments with the arm's length, optimal contracting model. The board has the authority to fire the CEO and pay the CEO her contractual severance benefits. Thus, there is no need to "bribe" a poorly performing CEO to step down. In addition, the signal sent by the golden goodbye will, if anything, only weaken the incentive of the next CEO to perform.

The making of such gratuitous payments, however, is quite consistent with the existence of managerial influence over the board. Because of their relationship with the CEO, some directors might be unwilling to go along with the firing unless the CEO is induced not to resist it or at least unless the CEO is very generously treated. Other directors might be willing to fire the CEO in any event but prefer to accompany the firing with a golden goodbye in order to favor or please the CEO, to

alleviate the discomfort they would otherwise feel for firing the CEO, or to make the difficult separation process more pleasant and less contentious. In all of these cases, directors' willingness to make gratuitous payments to the (poorly performing) CEO results from the CEO's relationship with and influence over the directors.

It is important to note that, taking managerial power *as given*, providing golden goodbyes to fired CEO's might be beneficial to shareholders in some instances. Given the loyalty of many directors to the CEO, such a golden goodbye might be necessary to assemble a board majority in favor of firing the CEO. If so, the golden goodbye would help shareholders when the CEO's departure is more beneficial to shareholders than the cost to them of the golden goodbye payment. For our purposes, however, what is important is that these payments reflect the existence and significance of managerial influence.

## V. SUBOPTIMAL PAY STRUCTURES

### A. *Pay Without Performance*

Optimal contracting arrangements might call for very large amounts of compensation for executives, provided that such compensation is designed to provide managers with powerful incentives to enhance shareholder value (Jensen and Murphy (1990)). The problem with current arrangements, however, is that the generous compensation provided executives is linked only weakly to managerial performance. This pay-performance disconnect is puzzling from an optimal contracting view.

The substantial part of compensation that is not equity-based has long been criticized as weakly linked to managerial performance. There is no significant connection between salary and bonus and the firm's industry-adjusted performance (Murphy (1999)). Non-equity compensation also increases when firm profits increase for a reason having nothing to do with managers' efforts (Blanchard, Lopez-de-Silanes, and Shleifer (1994), Bertrand and Mullainathan (2001)). Furthermore, managers receive substantial non-equity compensation in ways that have received less attention from financial economists – such as through favorable loans, pension and deferred benefits, and perks – and this less salient compensation also appears to be relatively insensitive to managerial performance (Bebchuk and Fried (2004), Ch. 8).

In light of the historically weak link between managerial performance and their non-equity compensation, shareholders and others have increasingly looked to equity-based compensation to provide the desired link between pay and performance. In the early 1990's, institutional investors and federal regulators

sought to encourage the use of such compensation, and the last decade has indeed witnessed a dramatic growth in the use of stock options. Unfortunately, however, managers have been able to use their influence to obtain option plans that appear to deviate substantially from optimal contracting in ways that favor managers.

We should emphasize our strong support for the general idea of equity-based compensation which, if well designed, can provide managers with very desirable incentives. The devil, however, is in the details. Below we discuss several important features of option compensation plans that are difficult to justify from an optimal contracting perspective but can readily be explained by the managerial power approach: the failure of option plans to filter out windfalls, the almost-uniform use of at-the-money options, and managers' freedom to unload options and shares.

### *B. Option Plans that Fail to Filter Out "Windfalls"*

One widespread and persistent feature of stock option plans is that they do not filter out stock price rises that are due largely to industry and general market trends and thus are unrelated to managers' performance. Under conventional option plans, when the market or sector rises substantially, even executives whose companies are performing poorly relative to the market or sector average can make large profits. Paying managers substantial compensation for stock price increases that have nothing to do with their performance is difficult to explain under optimal contracting. The substantial amount currently spent on rewarding managers for market or sector rises could be either used to enhance incentives (by, for example, giving managers a larger number of "reduced-windfall" options) or saved with little weakening of incentives.

There are many different ways of designing what we call "reduced-windfall" option plans - plans that filter out all or some of that part of the stock price increase which is unrelated to managers' performance. One approach discussed frequently by academics is linking the exercise price of options to a market-wide index or a sector index (e.g., Rappaport (1999)). Another strategy is to condition the "vesting" of options on the firm meeting specified performance targets. These targets can be linked to the stock price, earnings per share, or any other measure of firm performance.

When the exercise price of an indexed option is linked to market or sector averages, there is a substantial probability that the manager will receive no payoff from the option plan. If this possibility is regarded as undesirable, reduced-windfall options can easily be designed to produce a high likelihood of payout. For example, the exercise price could be indexed not to changes in the industry or market average

but rather to a somewhat lower benchmark – say, the change in the stock price of the firm which is at the bottom 20th percentile of the industry or market. Under such an option plan, executives would have on average an 80 percent probability of outperforming the benchmark and receiving a payout. But the executives would not be able to profit, as they could under conventional plans, when their performance places them in the bottom 20<sup>th</sup> percentile.

Given the wide variety of reduced-windfall options available and their potential benefits, it is likely that in a considerable number of firms it would be optimal to filter out at least some of the increase in the stock price that has nothing to do with the managers' efforts. Yet almost all U.S. firms use conventional stock options under which managers capture the full increase in stock price. In 2001, only about 5 percent of the 250 largest U.S. public firms used some form of reduced-windfall options (Levinsohn (2001)).

Financial economists have made substantial efforts to develop optimal-contracting explanations for why firms do not use reduced-windfall options. We survey the various explanations in our earlier work (Bebchuk, Fried, and Walker (2002), pp. 803-809) and conclude that none of them can adequately explain the widespread failure to screen out option windfalls.

Consider, for example, Himmelberg and Hubbard (1999), who offer an explanation based on the correlation between market booms and scarcity of talented managers. On their theory, when the economy booms, the demand for executives rises and companies must pay CEO's more to retain them. Allowing stock option pay to increase with rising market levels during boom periods responds to this need. One problem with this explanation is that, under conventional options plans, a stock market boom increases the value of an executive's vested options as well as of her unvested options. Much of this increase transfers wealth to the executive with little or no effect on her incentive to remain with the company. For example, the executive can exercise her fully vested options immediately, whether she remains with the firm or not; increasing the value of these options transfers value to the manager without affecting her decision to remain with the firm. If it were desirable to have an automatic mechanism that provides managers with greater incentive to remain in the company during stock market booms, it would be more cost-effective to provide executives with reduced-windfall options and to automatically issue them new and completely unvested (reduced-windfall) options. These new options would benefit managers only if they remain with the company until the end of the vesting period.

To consider another example, Aggarwal and Samwick (1999) suggest that conventional options might be useful to facilitate profit-maximizing collusion

among firms in the same industry. Screening out industry-wide effects, they argue, would provide managers an incentive to lower industry-wide returns by engaging in excessive competition, which would in turn lower profits. But even if fostering collusion among firms could explain the failure to filter out sector-wide price increases in some oligopolistic markets, the theory cannot explain why the 95% of firms that do not use reduced-windfall options fail to filter out broader market-wide price increases.

Although these and other optimal contracting explanations cannot easily explain the absence of reduced-windfall options, the absence of filtering out for general market or industry effects is not puzzling from the managerial power perspective. Under this approach, compensation schemes are designed with an eye to benefiting executives while ensuring that the schemes are not perceived as clearly unreasonable. Given that using conventional options is clearly legitimate and acceptable (most firms use them), and that moving to indexing or any other form of reduced-windfall options is likely to be costly or inconvenient for managers, the lack of any real movement toward such options is consistent with the managerial power approach.

### *C. At-the-Money Options*

Almost all stock options used to compensate executives are “at-the-money” -- that is, their exercise price is set to the market price at the time the options are granted (Murphy (1999), p. 2509). An optimally designed scheme would seek to provide risk-averse managers with cost-effective incentives to exert effort and make value-maximizing decisions. The optimal exercise price under such a scheme should depend on a multitude of factors that are likely to vary from executive to executive, from company to company, from industry to industry, and from time to time. Such factors might include the degree of managerial risk aversion, which in turn might be affected by the manager’s age and wealth, the project choices available to the company, the volatility of the company’s stock, the expected rate of inflation, and the length of the executive’s contract, among other things. There is no reason to expect that “one size fits all” - that the same exercise price level is optimal for all executives at all firms, in all industries, and at all times.

It is therefore highly unlikely that out-of-the-money options - options whose exercise price is above the current market price - are *never* optimal. Out-of-the-money options have a lower expected value than at-the-money options because they are less likely to pay off than at-the-money options, and if they do pay off the holder receives less value. Thus, for every dollar of expected value a firm can give more

out-of-the money options than at-the-money options. By giving more out-of-the money options, the firm can increase the reward to the manager for doing particularly well. Out-of-the-money options can hence offer much higher pay-for-performance sensitivity per dollar of expected value than conventional options (Hall (1999)). There is even evidence suggesting that giving managers out-of-the-money options rather than at-the-money-options would boost firm value on average (Habib and Ljungqvist (2000)). The almost uniform use of at-the-money options is thus difficult to explain from an optimal contracting perspective. Indeed, economists working within optimal contracting have called this practice a “puzzle” (Hall (1999), p. 43).

The near-uniform use of at-the-money options is not puzzling, however, when examined under the managerial power approach. All else equal, executives prefer a lower exercise price. Because at-the-money options might sometimes be optimal and are employed by almost every other firm, their use in any given case will not generate outrage. Therefore, there is little reason for plan designers to increase the exercise price above the grant-date market price.

Executives would be even better off, of course, if stock options were issued with an exercise price below the grant-date market price. However, such in-the-money options would create a salient windfall and might generate some outrage costs. Furthermore, in-the-money options would trigger a charge to accounting earnings, which might undermine a main excuse for not using indexed options or other reduced-windfall options – that the use of such options would hurt reported earnings (Bebchuk, Fried, and Walker (2002)). Because in-the-money options might thus be difficult or costly for plan designers to use, and at-the-money options are the most favorable to managers within the remaining range of possibilities, a uniform use of at-the-money options is consistent with the managerial power approach.

#### *D. Managers’ Freedom to Unwind Equity Incentives*

Another problem for the optimal contracting approach is managers’ broad freedom to unload their options and shares. Executives are typically permitted to cash out of these instruments as soon as they vest, as well as to choose the precise time of the unwinding.

The widespread lack of restrictions on exercising vested options, which reduces the performance sensitivity of managers’ compensation, is difficult to explain under optimal contracting. When managers unwind their equity incentives, restoring pay-performance sensitivity requires giving them new options or shares. Thus, such unwinding either (1) weakens managers’ incentives or (2) forces the firm

to give them new equity incentives to restore the level of incentives to the pre-unwinding level.

Although an executive becomes entitled to options once they have vested, the compensation contract could preclude the executive from “cashing out” the vested options – that is, from exercising the options and then selling the acquired shares – for a specified period after the vesting date. Such a limitation would maintain incentives for an additional period and thus avoid the need to grant new options to replace the ones that have been cashed out.

To be sure, restrictions on executives’ ability to cash out vested incentive instruments impose liquidity and diversification costs on managers that must be balanced against the incentive benefits of restricting unwinding. The efficient arrangement is likely to vary from case to case, depending, among other things, on the magnitude of the executive’s nonequity compensation. But there is no reason to expect that optimal contracts would generally make the vesting date and the cash-out date identical.

Yet, in practice the date on which options vest and the date on which the executives can exercise them are almost always the same. A minority of firms have created “target ownership plans” that require managers to hold a certain amount of shares (Core and Larcker (2002)). But the targets tend to be rather low and there often appears to be no penalty imposed for missing the target. As a result of these weak restrictions, managers exercise many of their options well before the options expire, and sell almost all of the shares thereby acquired (Carpenter (1998), Ofek and Yermack (2000)). Shares that are not sold after option exercise are often hedged or partially hedged in transactions that are not reported to the SEC (Bettis, Bizjack, and Lemmon (2001)).

Managers also typically have freedom to determine the precise time of unwinding, a practice that is also difficult to explain under optimal contracting. Although it is illegal for managers to trade on “material” inside information, it is often difficult to prove that a manager used particular items of information in deciding to trade. Thus managers frequently can trade on valuable inside information with little fear of liability (Fried (1998)). As a result, managers are able to obtain abnormal returns trading in their firm’s shares (Seyhun (1998)).

Because a firm can be held liable if it fails to take reasonable steps to prevent insider trading by its employees, a number of firms have adopted “trading windows” and “blackout periods” to restrict the times during the year that a manager can sell or buy shares (Bettis, Coles, and Lemmon (2000)). But many firms have not put such restrictions in place. Even in firms that have imposed such restrictions, managers who know undisclosed bad news at a time they are permitted

to trade may use that trading opportunity to unwind a substantial amount of their holdings.

Enabling executives to capture extra profits by controlling the timing of their sales is unlikely to be an efficient compensation mechanism. The profits executives make by selling or hedging large quantities of shares when they know undisclosed bad news are decoupled from performance. Indeed, as will be discussed below, managers' ability to control the timing of their sales also produces counter-productive effects on their incentives.

Firms could easily prevent executives from selling before bad news is released. Firms could require that sales be carried out gradually over a specified period, perhaps pursuant to a prearranged plan. Alternatively, executives could be required to publicly disclose in advance their intended trades (Fried (1998)). Announcements of unusually large sales would signal the possibility that executives know bad news about the firm, driving the price down and reducing executives' ability to make profits trading on their inside information. Yet firms generally do not impose any such restrictions.

Although managers' freedom to unwind equity incentives early and to control the precise timing of their unwinding cannot easily be explained under optimal contracting, it can be explained under the managerial power approach. Broad freedom to unwind incentives provides managers with benefits in a way that is not particularly conspicuous. Managers' freedom to unwind incentives and to determine the precise timing of their trades allows them to receive considerable compensation even when the firm ends up doing rather poorly. In one notorious case, Enron insiders sold hundreds of millions of shares in the company before the release of information about Enron's actual financial condition and the resulting collapse of its stock price. Furthermore, and perhaps most importantly, managers' freedom to unwind incentives as soon as they vest and their practice of doing so provides a convenient justification for giving managers additional equity-based compensation: the need to restore the strength of managers' incentives.

## VI. COSTS TO SHAREHOLDERS

What are the costs imposed on shareholders by managers' influence over their own pay? To begin with, there is the excess pay managers receive as a result of their power – the difference between what managers' influence enables them to obtain and what they would get under an arm's length arrangement. Some might think that this problem is only symbolic, and that these rents have little actual effect on shareholders' bottom line. But a close look at the amounts involved indicates that

they add up to more than small change. In 2000, CEO compensation in firms making up the 1500-company ExecutiveComp dataset CEO compensation was on average 7.89% of corporate profits (Balsam (2002), p. 262).

Furthermore, and perhaps more importantly, managers' ability to influence their pay leads to compensation arrangements that generate worse incentives than those that would be provided under an arm's length bargain. Managers have an interest in schemes that camouflage the extent of their rent extraction and in schemes that put less pressure on them to reduce slack. As a result, managerial influence might lead to the adoption of compensation arrangements that provide weak or even perverse incentives. In our view, the reduction in shareholder value caused by these inefficiencies, rather than the excess rent captured by managers, could be the biggest cost arising from managers' ability to influence their compensation.

First of all, compensation arrangements currently provide weaker incentives to reduce managerial slack and increase shareholder value than would be provided by arm's length arrangements. As explained, both the non-equity and equity components of managers' compensation are substantially more decoupled from the managers' contribution to firm performance than superficial appearances might suggest. Shareholders could benefit substantially from the improved performance that a move toward optimal contracting arrangements could generate.

Prevailing practices not only fail to provide cost-effective incentives to reduce slack but also create perverse incentives. For one thing, they provide managers incentives to change firm parameters in a way that would justify increases in pay. Consider, for example, the familiar problem of empire-building. It is commonly believed that the practice of granting options provides some incentives not to undertake acquisitions that are value-decreasing for shareholders. This is clearly the case, however, only in a static model in which all option grants are made before managers make acquisition decisions. In a dynamic model, managers considering an expansion decision that is somewhat value-decreasing to shareholders would have different incentives: While such an expansion would reduce the value of their current options, it may well raise their aggregate future compensation by an even greater amount because a large firm size can be used to justify higher pay.

Furthermore, managers' broad freedom to unload equity incentives can produce substantial inefficiencies that are modeled in Bar-Gill and Bebchuk (2002, 2003a, 2003b). Executives who expect to unload their shares or options have a weaker incentive to exert ex ante efforts whose payoffs are not going to be recognized by the market at the time they unwind their equity positions. Such executives also have incentives to misreport corporate performance and suppress

bad news. Indeed, such executives also have incentives to choose projects that are less transparent or to reduce the transparency of existing projects. The efficiency costs of such distortions might exceed, possibly by a large amount, whatever liquidity or risk-bearing benefits executives obtain from being able to unload at will their options and shares.

## VII. CONCLUSION

There are good theoretical and empirical reasons for concluding that managerial power has a substantial influence on the design of executive compensation in companies marked by a separation of ownership and control. Executive compensation can thus be fruitfully analyzed not only as an instrument for addressing the agency problem arising from the separation of ownership and control, as in the optimal contracting approach, but also as part of the agency problem itself.

The conclusion that managerial power and rent extraction play an important role in executive compensation has significant implications for corporate governance, which we explore in our forthcoming book. It is important to note, however, that this is an area in which widespread recognition of the problem might in fact contribute to alleviating it. The extent to which managerial influence can move compensation arrangements away from optimal contracting outcomes depends on the extent to which market participants, especially institutional investors, are aware of, and on guard against, the problems we have discussed.

Financial economists can thus make an important contribution to improving compensation arrangements and in turn shareholder value by analyzing the extent to which current compensation practices deviate from those suggested by optimal contracting. We hope that future studies of executive compensation will devote to the role of managerial power as much attention as the optimal contracting model has received.

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