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Gerety, Mason; Hoi, Chun-Keung; Robin, Ashok

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Do Shareholders Benefit from the Adoption of Incentive Pay for Directors?

Mason Gerety, Chun-Keung Hoi, and Ashok Robin*

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*Mason Gerety is a Professor of Finance at Northern Arizona University. Chun-Keung Hoi is an Assistant Professor of Finance at Rochester Institute of Technology. Ashok Robin is a Professor of Finance at the Rochester Institute of Technology.

Do Shareholders Benefit from the Adoption of Incentive Pay for Directors?

Abstract

We assess the stock market reaction to proposals of incentive plans for directors in a sample of 289 firms. We note a reaction that is both economically and statistically insignificant. This result suggests that shareholders do not necessarily benefit from the adoption of such plans. Across firms we find that the market reaction depends on whether the CEO is involved in director selection. We find that stock markets react negatively to plans proposed by firms without nomination committees. Our findings highlight the important link between corporate governance and the effectiveness of director incentive plans.

Do Shareholders Benefit from the Adoption of Incentive Pay for Directors?

In the United States, most publicly traded firms use incentive pay to motivate senior managers. This is accomplished by using stocks, stock options, and other equity-based compensation as an integral part of managerial compensation contract. Recently, there has been a move to offer incentive pay to corporate directors. For example, the National Association of Corporate Directors issued a Blue Ribbon Report in 1995 that advocates the use of equity-based compensation to align the interests of shareholders and directors. Although many firms are jumping on this bandwagon, there is little empirical evidence on whether shareholders actually benefit from providing directors with incentive pay.

In this paper, we provide direct evidence on the issue of incentive pay by analyzing the impact on shareholder wealth of proposals to adopt such pay for directors. If the proposed plans create a significant alignment of incentives between shareholders and directors, we would expect a favorable stock market reaction. But, if the plans do not modify director incentives in favor of shareholders, we would expect either a zero or a negative stock market reaction. Using proxy statements between 1988 and 1998, we obtain a sample of 289 firms that make such proposals. We use a standard event study method to answer this research question.

For the overall sample, we find a statistically and economically insignificant reaction. Our sample covers 11 years and represents the initial experience of firms that provide incentive pay for directors. During this period, it appears that firms have not been successful in using director incentive pay to enhance shareholder value. The benefits of incentive alignment between directors and shareholders have not been realized.

This study also extends the findings of recent studies that suggest an association between corporate governance and the effectiveness of incentive compensation for managers. We investigate whether the stock market reaction to director incentive pay depends on the quality of the corporate governance structure. We focus on the issue of CEO involvement in director selection. We reason that when the CEO has greater influence over the director selection process, the board of directors is less effective in monitoring managerial discretion. Therefore, we expect a less favorable stock market reaction to the adoption of director incentive pay plan when the CEO is involved. Our results support this hypothesis. We find that stock markets react negatively to plans proposed by firms with involved CEOs. We perform cross-sectional tests and confirm that after we control for board characteristics, firm performance, and variables capturing both firm characteristics and plan attributes, the event study results are robust. We conclude that corporate governance structure affects the effectiveness of incentive pay for directors.

We also provide evidence on plan characteristics that support our results on CEO involvement. We find that firms with involved CEOs tend to use director incentive compensation in a somewhat ineffective manner, which might explain their lower abnormal returns. These firms are more likely to use incentive pay to increase the directors' overall compensation while preserving the directors' existing annual retainer, and they also tend to grant their directors options and restricted shares with more favorable, shorter, vesting requirements.

The paper is organized as follows. Section I reviews the debate on director compensation. We outline our conjecture on how CEO involvement in director nomination affects the stock market reaction to proposals of incentive plans for directors. In Section

II, we describe our sample and present our empirical results. We present the event study results as well as results from cross sectional regressions. Section III summarizes and concludes.

I. On Incentive Pay for Directors

In this section, we discuss the issues of providing directors with incentive pay and generate testable hypotheses. We review the debate on incentive compensation for directors and present our hypotheses.

A. Two Opposing Views

Agency theory predicts that directors with more significant equity ownership have greater incentives to monitor the CEO. Many empirical studies support this prediction. Bhagat, Carey, and Elson (1999) find a correlation between the dollar value of a director's equity holding and the likelihood of a disciplinary-type CEO succession in a poorly performing company. Perry (1998) finds that the likelihood of CEO turnover following poor performance is significantly greater when directors of independent boards receive incentive pay than when they do not. Shivdasani (1993) finds that hostile takeovers are more likely when target firms' outside directors own less equity.

The use of incentive pay in a director's compensation package can benefit shareholders by increasing the director's equity ownership. Michael Jensen presented this idea in his 1993 Presidential Address to the American Financial Association:

Boards should have an implicit understanding or explicit requirement that new members must invest in the stock of the company. While the initial investment could vary, it should seldom be less than \$100,000 from the new board member's personal funds; this investment would force new board members to recognize from the outset that their decisions affect their own wealth as well as that of remote shareholders. Over the long term the investment can be made much larger by options or stock-based

compensation. The recent trend to pay some board member fees in stock or options is a move in the right direction. Discouraging board members from selling this equity is important so that holdings will accumulate to a significant size over time. (emphasis added)

According to this viewpoint, two elements are critical to the design of effective director incentive pay contracts. First, it is important that the contract puts directors' wealth at risk. Jensen argues that risk can be introduced either by requiring a newly appointed director to invest in the firm's stock using personal funds or by compensating an incumbent director with equity-based instruments instead of the usual annual cash retainer. Second, the plan should encourage directors to maintain a sizeable equity interest in the firm throughout their tenure.

Shareholder interest groups, institutional investors, and the general business community appear to share the Jensen's view and have also advocated incentive pay for directors. For instance, both the TIAA-CREF and the California Public Employees' Retirement System support the idea that directors should maintain a minimum level of ownership in the company's stock. The 1995 Blue Ribbon Commission on Director Compensation of the National Association of Corporate Directors recommends six "best practices," including setting substantial target for stock ownership by each director and using stock options and other equity-based compensation to achieve this share-ownership goal.

Although the idea of extending incentive pay to director compensation has gained widespread support, opponents (e.g., Kaback, 1996) question whether it is an effective means of aligning the interests of shareholders and directors. Unlike incentive compensation for executives, companies seldom find it justifiable to provide large, explicit monetary rewards, either in stock or in cash, to their directors. Given the current contracting environment, it is unlikely that director incentive pay contracts can result in the

levels of investments that Jensen (1993) and other proponents would find appropriate. Besides, it is also questionable whether monetary benefits appeal as strongly to the director's self-interests as non-monetary benefits. For example, Lorsch and MacIver (1989) find that corporate directors perceive the prestige and business contacts that are associated with their directorships as more valuable than explicit monetary rewards. Furthermore, if alternative corporate governance mechanisms have already aligned the interests of directors and shareholders, then there can be little additional benefit from providing directors with incentive pay. In fact, Coles and Hoi (2001) and Gerety and Lehn (1997) find that the labor markets provide significant discipline by encouraging directors to act on behalf of their shareholders.

We address these opposing arguments in our study by assessing the desirability of incentive pay for directors from the perspective of shareholders. We hypothesize that the announcement of incentive pay for directors will result in a positive revision of share prices. We use a standard event study method to test this hypothesis.

B. CEO Involvement in Director Selection

In addition to testing the hypothesis regarding the overall desirability of incentive pay for directors, we seek cross-sectional inferences on firm and plan characteristics. Our main approach here is to relate the share price reaction to a key corporate governance structure, the involvement of the CEO in director selection. We hypothesize that shareholders are less likely to benefit from the adoption of director incentive plans when the CEO is involved in director selection.

In this paper, we assume that a firm with an involved CEO is likely to have a weaker board of directors that provides little or ineffective control of the CEO. Our assumption is based on Shivdasani and Yermack (1999), who find that CEOs use their

influence over the director selection process to compromise board monitoring. We define a CEO as involved when he serves on the nomination committee or when no nomination committee exists. Since the nomination committee is responsible for selecting the slate of directors, when the CEO who serves on this committee, he is able to influence director selection. However, a CEO can also influence director selection when there is no nomination committee. Here, the board as a whole or the executive committee is responsible for nominating the slate of directors.

We argue that if an involved CEO handpicks the directors and a handpicked board provides little monitoring of managerial discretion, then giving additional equity-based compensation to directors is unlikely to create a significant incentive effect. Additional equity-based compensation will not make directors more effective if they are not predisposed to actively monitor the CEO in the first place. Thus, when the CEO is involved in director selection, we conjecture that adding equity-based components to the director's compensation package is equivalent to "throwing good money after bad." In this situation, the marginal benefits from adopting director incentive pay plans could be relatively small.

Moreover, recent research suggests that weaker boards are more inclined to use managerial incentive compensation ineffectively. For example, Yermack (1995, 1997) finds that firms grant options to their executives in an ineffective manner and that managers use options in an opportunistic way to increase their compensation. Core, Holthausen, and Larcker (1999) find that CEOs at firms with less active boards of directors tend to receive greater compensation. Newman and Mozes (1999) find that the presence of insiders in the compensation committee biases the relation between

compensation and performance in favor of CEOs. Meulbroek (2001) questions whether managerial incentive compensation plans are cost effective.

We extend this literature by focusing on the link between CEO involvement and incentive pay for directors. We conjecture that when CEOs are involved in the director selection, firms might be more likely to adopt ineffective director incentive plans. These ineffective plans could offer directors higher, more lucrative pay, but still do not create a significant alignment of interests between the directors and shareholders. However, they could give the involved CEOs the appearance of conforming to behavior that outside parties deem desirable, and could thus confer legitimacy on the current governance structure (Westphal and Zajac, 1994). We conjecture that the ineffective use of director incentive plans will not enhance shareholder wealth.¹

In sum, we expect to observe a less favorable stock market reaction to proposals that adopt director incentive plans when the CEO serves on the nomination committee or when no nomination committee exists.

II. Empirical Results

¹ We also expect an ambiguous relation between board composition (i.e., the proportion of independent outside directors on the board) and the market's reaction to proposals of director incentive plans. An independent board with a majority of independent outside directors is more likely to adopt a director pay plan that benefits shareholders. However, if an independent board is already aligned with shareholder interests, then little marginal benefit can come from adopting incentive pay plans for directors. Similarly, a board that is not independent might not be effective, even if incentive pay is given to directors.

We assess the desirability of incentive pay for directors from the perspective of shareholders using a standard event study method as well as cross-sectional regressions. In the following sections, we describe our sample and data collection procedures, and discuss our event study and cross-sectional results.

A. Sample and data

We gather a preliminary sample of approximately 1,000 firms that propose equity-based compensation for non-employee directors from the Investor Responsibility Research Center (IRRC).

Firms proposed these incentive plans for directors at annual meetings held between September 1, 1987 and August 31, 1998. The IRRC data contain both voting results and the agenda of the proxy, including the proposed director incentive pay plans. We use the IRRC proxy agenda to isolate the proposals on director incentive pay. We delete proposals containing other management-sponsored agenda items. Our screening procedure follows that of Brickley, Bhagat, and Lease (1985) and DeFusco, Johnson, and Zorn (1990), who study incentive pay plans for management. Following these authors, we do not consider a proxy contaminated if it contains shareholder proposals. In general, each “uncontaminated” proxy statement contains also the ratification of the auditor and the election of directors. This initial screening procedure gives us a sample of 316 firms with uncontaminated proposals. We then obtain stock price data from the CRSP files, accounting information from Compustat, and board and plan data from the actual proxy statements.

From this initial sample of 316 firms, we exclude 27 firms for various reasons. We remove 14 firms for which proxy statements are either unavailable (five firms) or have contaminated management-sponsored agenda items not reported in the IRRC data

(nine firms). We delete 11 firms because there is inadequate stock price information from CRSP. We also remove one firm involved in a bankruptcy proceeding and another because the president of the United States nominated some board members.

Table I shows the type of plan and the mean percentage of stockholders who endorse the plans. In general, these plans pass by large majorities, with an average favorable vote of about 89%. A majority (71%, or 205 of 289) of the plans are new. In these cases, firms offered equity-base compensation to their directors for the first time. Of the remaining 84 plans, some provide additional incentive pay and others change the parameters of existing plans, such as option maturity and vesting period. The plans that provide additional incentive pay typically involve a new form of equity-based compensation (e.g., options) to augment existing incentive pay (e.g., restricted shares). Most of the plans in our sample, about 53% (152 of 289), include option grants to directors. The others are either restricted shares plans (17% of the sample) or stock award programs (11% of the sample).

[Table I about here]

We note that 222 plans (77%) provide additional equity-based compensation to directors while preserving the existing annual cash retainer. We refer to these as “gravy” plans. Some gravy plans provide equity-based compensation as a net addition to the director’s annual retainer. Other gravy plans require that awards of additional equity-based compensation be contingent on firm performance. Although non-gravy plans often increase the director’s overall compensation as well, such plans require a tradeoff in the director’s retainer. Thus, all else equal, a non-gravy plan can put more of a director’s total compensation at risk. Given Jensen’s (1993) call for firms to replace the director’s cash retainer with other forms of equity-based compensation, the large proportion of

gravy plans is surprising. However, we do observe a recent trend towards fewer gravy plans. Among the plans proposed during the 1988-1991 period, we can characterize 85% (72 of 84 plans) as gravy. In contrast, only 73% (150 of 205) of the proposals during the 1992-1998 period are gravy.

We present selected firm characteristics in our sample in Table II, Panel A. The average firm size, as measured by net sales, is \$1,469 million. The average unadjusted stock return over the past two years (past performance) for firms in the sample is roughly 29%. There appears to be wide dispersion in firm size and past performance. The average firm has a market-to-book ratio of 1.16. Following Lehn and Poulsen (1989) we define free cash flow as undistributed cash flow divided by the market value of equity; the mean value of this variable is 0.079. About 19% of the firms are in regulated industries, such as utility, banking, and insurance.

[Table II about here]

Table II, Panel B, provides summary statistics on board size, board composition, and inside ownership. We obtain these data from the proxy statements. The average board size is 11. We use the three-way director classification of Weisbach (1988), Byrd and Hickman (1992), Brickley, Coles and Terry (1994), and Cotter, Shivdasani, and Zenner (1997).² Outsiders constitute 60% of the board, insiders 29%, and gray directors 11%. The equity ownership of directors and officers as a group is 9.22%. These board characteristics are similar to those reported in other studies.

² Directors are classified as inside, outside, or gray directors. Inside directors are directors who are current or past employees of the company. Outside directors are non-employee directors with no existing or past tie with the firm or its management, except for the directorship. Gray directors are non-employee directors who have existing, or past, financial and/or personal ties with the firm or its management.

Table II, Panel C, provides information on the structure of the nomination committee. We observe that in 128 firms (44%), the CEO is uninvolved in director selection because he does not serve on the nomination committee. In the remaining firms, the CEO may be involved in director selection either by serving on the nomination committee (68 firms), or by the firm not having a standing committee responsible for choosing directors (93 firms). Our sample indicates a slightly higher rate of CEO involvement (56%) than that reported by Shivdasani and Yermack (1999) (48%). This difference is probably due to smaller firm size in our sample. Shivdasani and Yermack report mean sales figure of \$8,830 million while our sample firm averaged \$1,469 million in sales.

As do Shivdasani and Yermack (1999), we observe a recent trend of reduced CEO involvement in director selection. Between 1988 and 1991, 68% of the firms (57 of 84) that propose director incentive plans have involved CEOs. This percentage falls to 51% (105 of 205) during the period 1992-1998. We observe a recent decline in both types of CEO involvement. Between 1988 and 1991, about 42% of the firms in our sample do not have a nomination committee and about 26% of those that do have a nomination committee allow the CEO to serve as a member of the committee. In contrast, during the 1992-1998 period, the proportion of firms without a nomination committee drops to 28% and the proportion of firms where the CEO serves on the nomination committee drops to 23%.

Between the two types of CEO involvement in our sample, where the CEO serves on the nomination committee is perhaps the less harmful scenario for stockholders. In this scenario, it appears more likely that outside directors dominate the nomination committee or an outside director serves as the chairman of the committee. We define an

outsider-dominated nomination committee as one that comprises at least 50% outsiders. We find that among the 68 firms where CEOs serve on the nomination committee, 47 firms (69%) have an outsider-dominated nomination committee. Furthermore, we find that CEOs rarely chair nomination committees. In the 42 firms (62%) in which we could determine chairmanship, 33 chairmen are outside directors, seven are CEOs, and two are gray directors.

When firms permit the CEO to serve on the nomination committee, these moderating arrangements might help to control managerial opportunism. In contrast, in firms where a nomination committee does not exist, we find that either the executive committee (18 firms) or the board of directors as a whole (69 firms) handles director nomination. In both of these cases, director selection remains a prerogative of the CEO. We find that shareholders can be exposed to greater managerial opportunism in firms without a nomination committee.

B. Plan Attributes and CEO Involvement

The results in Table III show a correlation between the CEO's involvement in director selection and the characteristics of proposed director incentive plans. The data in Panel A suggest that firms without a nomination committee are more likely to propose a gravy plan. About 84% of the plans (78 of 93) proposed by such firms are gravy. In comparison, the proportions of gravy plans are roughly 72% (49 of 68) when the CEO serves on the nomination committee and 74% (95 of 128) when the CEO does not serve on the nomination committee.

Using a χ^2 test, we reject the null hypothesis that the proportion of gravy plans in the no-nomination-committee subsample is equal to the proportion of gravy plans in the rest of the sample (p -value = 0.05). The data from Panel A also suggest that firms

without a nomination committee are more likely to adopt an option plan, and they appear to be less inclined to adopt a restricted share plan or a stock award plan. For instance, the proportion of firms offering option plans is 67% (62 of 93) in firms without a nomination committee, compared to 43% (29 of 68) when the CEO is on the nomination committee.

[Table III about here]

Table III, Panel B, reports the vesting requirements in the option plans ($n=143$). A firm without a nomination committee is more likely to give directors options that can be immediately exercised (NOWAIT). About 26% (15 of 57) of firms without a nomination committee propose a NOWAIT option plan. The corresponding numbers are 15% (5 of 27) when the CEO serves on the nomination committee and 14% (8 of 56) when the CEO does not serve on the nomination committee. Using a χ^2 test, we reject the null hypothesis that the proportion of NOWAIT option plans in the no-nomination-committee subsample is equal to the proportion of analogous option plans in the rest of the sample (p -value = 0.07).

However, this finding could be confounded because vesting requirements of incentive compensation contracts might vary systematically with the assets under the firm's management. For example, Kole (1997) finds that firms with greater research intensity require their executives to hold the options for a longer period of time. Following Kole, we use research intensity to capture the firm's operating environment. We define research intensity as the ratio of expenses on research and development to net sales as of the year prior to the proposal of director incentive plan. Using a standard ANOVA, we fail to reject the null hypothesis that average research intensity in the no-nomination-committee subsample is equal to average research intensity in the rest of the sample (p -value = 0.66). Thus, variations in the sample firms' operating environment (research

intensity) do not explain the correlation between option plans' vesting requirements and CEO involvement.

Table III, Panel C, examines the vesting requirements in the restricted share plans ($n=49$). We observe that many firms require their directors to hold restricted stock awards for a long period of time. In fact, about 31% (15 of 49) of the restricted stock plans are classified as VEST_LONG plans, because they require directors to hold the restricted stock award until retirement. We find that firms without a nomination committee are less likely to propose such plans; only 13% (one of eight) of firms without nomination committees propose these plans. In contrast, the proportion of VEST_LONG plans is 18% (three of 17) when the CEO serves on the nomination committee and 46% (11 of 24) when the CEO does not serve on the committee. Using the χ^2 test, we reject the null hypothesis that the proportion of VEST_LONG restricted stock plans in the nomination-committee subsample is equal to the proportion of analogous plans in the rest of the sample (p -value = 0.07). Again, using a standard ANOVA, we confirm that research intensity does not explain the correlation between the vesting requirements in restricted stock plans and CEO involvement.

C. Event Study Results

We now analyze the stock returns over a three-day period that surrounds the mailing of the proxy statement containing the proposal to adopt an incentive pay plan for non-employee directors. We use the three-day event window to control for potential leakage of information and to allow the stock market adequate time to react to the proposed plans. The three-day event window is centered on the mailing date ($t=0$) reported in the proxy statement and includes both the first trading day prior to, and the trading day that immediately follows, the proxy mailing date. We calculate abnormal

returns from a market model that we estimate over the period $t = -120$ to $t = -30$, using returns for the CRSP equally weighted index with dividends.³

Unless otherwise indicated, we use the standardized prediction error of Dodd and Warner (1983) to conduct statistical tests. We screen our observations for potentially confounding news surrounding the proxy mailing event window using the *Wall Street Journal Index* and the *Dow Jones Interactive*. We obtain a final sample of 283 firms after excluding six cases of confounding news.

1. Are Director Incentive Plans Value-Enhancing?

Table IV, Panel A, presents event-period abnormal returns for the full sample of directors' incentive compensation plans proposed between 1988 and 1998. The average three-day cumulative abnormal return (CAR) is -0.27% and statistically insignificant (p -value = 0.46). The median CAR is -0.33%. The Wilcoxon signed-rank test fails to reject the null hypothesis of zero median abnormal return at conventional levels (p -value = 0.11). Not surprisingly, the numbers of positive and negative abnormal returns are about equal. The average reduction in firm value of -\$834,439 (not reported in the table) is also economically insignificant.

[Table IV about here]

The average market reaction in our sample suggests that shareholders do not necessarily benefit from the adoption of incentive compensation for directors. This result is quite interesting, given the fact that many U.S. firms are beginning to extend incentive pay to their directors. Although the evidence does not lend credence to the conventional wisdom, neither does it imply that providing directors with incentive pay is an ineffective means to align the interests of shareholders and directors. Given the correlation between

³ Results are similar if we use the CRSP value-weighted index with dividends in the event study.

plan attributes and CEO involvement (see II.B. and Table III), our event study results indicate that the potential benefits of incentive alignment have not been fully realized. The most plausible explanations are that firms use director incentive plans ineffectively, the existing corporate governance structure do not permit the realization of benefits from such plans, or both.

2. Market Reaction by CEO Involvement

Next, we examine the issue of CEO involvement in director selection. Table IV, Panel B, reports the announcement-period abnormal returns associated with the three types of CEO involvement. Our findings support the hypothesis that CEO involvement in director selection will result in lower abnormal returns. We find positive but statistically insignificant CARs when CEOs are not involved in director selection (Group #3). The average CAR of 0.32% and the median CAR of 0.01% have p -values to 0.3 and 0.95, respectively. In contrast, markets react negatively to director incentive plans that are proposed by firms without a nomination committee (Group #1). The average CAR of -1.08% and the median CAR of -0.49% are statistically significant; the p -values are 0.02 and 0.03, respectively.

We note that although we focus on the relative price reactions in the CEO-involved and CEO-uninvolved samples, the negative returns for the no-nominating-committee subsample raise a separate and interesting issue. The magnitude of abnormal returns appears too large to be fully explained by the explicit costs and benefits of the proposed director incentive plans. Our earlier findings (see II.B. and Table III) show that firms without a nomination committee tend to use director incentive compensation ineffectively by proposing plan-terms that favor the directors. Thus, one explanation for

the negative returns is that market participants perceive the ineffective use of director incentive compensation as a signal of managerial inefficiency and/or board complacency.

Finally, we expected that the least problematic of the CEO involvement scenarios would be the one where the CEO serves on the nomination committee (Group #2). We find that the CAR in this scenario is not as negative. Here, the average CAR of -0.29 and the median CAR of 0.04 are both statistically insignificant.

We perform a formal test of the null hypothesis that the mean CAR for firms without a nomination committee is equal to the mean CAR in the rest of the sample (i.e., Group #1 compared to Groups #2 and #3). The results are reported in Panel C of Table IV. The F-test (ANOVA) rejects the null hypothesis of equal means (p -value < 0.03). Because the F-test is a parametric test, it might be influenced by observations that substantially deviate from the mean. As a robustness check, we perform additional non-parametric tests based on both median values and the proportion of positive values. The Wilcoxon rank-sum test rejects the null hypothesis of equal medians for CARs (p -value = 0.05). However, the χ^2 test fails to reject the null hypothesis of equal proportions of positive CARs at conventional levels (p -value = 0.12).

D. Cross-Sectional Analysis

The results of our event study indicate that in the aggregate, shareholders do not benefit from adopting incentive pay for directors, and that shareholders are less likely to benefit when the firm does not have a nomination committee. Here, we further examine the latter result. We consider the possibility that the univariate results are influenced by plan attributes and firm characteristics such as past performance and board characteristics. We use cross-sectional multiple regression analysis to control for these effects.

Table V presents estimates for the Ordinary Least Square (OLS) and PROBIT models that relate market reaction to CEO involvement. In all regression models, we use the final sample of “clean” plans with available information in CRSP, Compustat, and proxy statements ($n=273$). The number of observation drops by ten firms relative to the event study because of the additional data requirement. In the OLS models (Models 1, 3, and 5), the dependent variable is the three-day cumulative abnormal return (CAR) surrounding the mailing of the proxy statement that contains a clean proposal to adopt incentive pay for non-employee directors. The PROBIT models (Model 2, 4, and 6) use the dummy variable POSCAR as the dependent variable. POSCAR equals one if the CAR is positive. By using a dummy variable as the dependent variable, the PROBIT results are less likely to be affected by the outlier problem.

[Table V about here]

1. The Link Between Market Reaction and CEO Involvement

Models 1 (OLS) and 2 (PROBIT) are the baseline models. Based on our earlier findings, we use the dummy variable NONOM to capture the effects of CEO involvement. NONOM equals one if there is no nomination committee. We expect a negative coefficient for this variable. We control for prior market-based firm performance using the variable PAST_RETURN, which we define as the difference between the buy-and-hold returns of the company’s stock and the CRSP equally weighted portfolio during the two-year period prior to the year of the adoption. We conjecture that firms with poor stock price performance are more likely to benefit from providing directors with incentive compensation. While under-performing firms may have a greater demand for good quality outside directors (Hermalin and Weisbach, 1988), board slots in these firms could be less attractive to prospective director candidates. Thus, providing

additional equity-based compensation might enhance the firm's position in the labor market for directors and benefit shareholders.

In both Models 1 (OLS) and 2 (PROBIT), estimates on the intercept term are relatively small in magnitude and statistically insignificant. These results indicate that the stock market does not respond significantly to the adoption of director incentive plans when the board has a nomination committee. The coefficients of NONOM are negative and statistically significant (p -value = 0.02 and 0.05 for Models 1 and 2, respectively), indicating that the stock market reacts more negatively to those plans proposed by firms without nomination committees. The point estimate of -0.014 from the OLS regression suggests that the CAR is about 1.4% lower for firms without nomination committees, after controlling for firm performance. The PROBIT results support the OLS findings, indicating a lower probability of a positive CAR for firms without a nomination committee. Based on the parameter estimates from the PROBIT model, we find that the probability for a positive CAR is 52% for firms with a nomination committee and 48% for firms without a nomination committee. We calculate the respective probabilities by evaluating the cumulative normal function over the mean of prior stock returns during the two-year period prior to the year of the adoption and the two values of the dummy variable, NONOM.

We note that our implementation of the CEO involvement variable in these cross-sectional regression models differs from that of Shivdasani and Yermack (1999). Shivdasani and Yermack find that the lack of a nomination committee or the presence of the CEO in the committee makes the choice of outside directors ineffective, but we find that only the lack of a nomination committee is associated with lower market reaction for the adoption of director incentive compensation.

A strict implementation of the Shivdasani and Yermack (1999) variable leads to mixed results in the cross-sectional analysis. For example, in the PROBIT specification, the revised CEO involvement variable is insignificant. We also add to the specification of our baseline models an additional dummy variable that captures whether the CEO serves on the nomination committee (see Section C.2. and Table IV). We find that this variable adds little explanatory power to the models.

We also report on the influence of firm performance. In the OLS model (Model 1) the coefficient of PAST_RETURN is negative (-0.011) and statistically significant (p -value = 0.02). Although the comparable estimate is negative in the PROBIT regression (Model 2), it is only marginally significant (p -value = 0.1). Therefore, we have only weak support for the argument that under-performing firms are more likely to benefit from the adoption of director incentive compensation.

Our results from the baseline cross-sectional models support those of the event study. When we control for firm performance, we find that the market reaction to the adoption of director incentive plan is negatively related to CEO involvement in director selection. Since this result is maintained even in the PROBIT specification of the models, it appears that the results are not unduly influenced by extreme observations.⁴

⁴ We have conducted numerous alternative tests examining the robustness of our findings. The results obtained from these alternative specifications are qualitatively similar to those reported here. In sum, the preponderance of the evidence suggests that our results are quite robust. We have performed (1) OLS regressions using the standardized abnormal returns as the dependent variable (standardized CAR), (2) quantile regressions on both CARs and standardized CARs (Koenker and Bassett, 1978), (3) OLS regressions and PROBIT regressions on various samples trimmed by 1%, 5%, and 10% on both tails and (4) OLS regressions on winsorized data. We have verified that our models are not affected by the multicollinearity problem by using the procedure outlined in Belsley, Kuh, and Welsch (1980) and Green (1997).

2. The Effects of Plan Attributes and Board Characteristics

Results from the baseline regression models confirm that the effects of director incentive pay depend on the existing corporate governance structure. However, this link would be more credible if the regression models were to include control variables for plan attributes and board characteristics. The control for plan attributes is particularly relevant, since our descriptive analysis shows that the plans are less incentive-like for firms without nomination committees.

Model 3 (Model 4) reports the OLS (PROBIT) estimates by using four additional variables to control for plan attributes and board characteristics. We control for whether the plan provides additional equity-based compensation to directors while preserving the annual retainer; whether incentive pay is offered to directors for the first time; the fraction of board occupied by outside directors; and the equity holdings by executives and directors of the firm. We find that our earlier results are robust. The estimates on NONOM remain negative and statistically significant with p -values of 0.02 and 0.06 for Models 3 and 4, respectively. Again, the coefficient of PAST_RETURN is negative and significant in the OLS model (p -value = 0.02), but it is only marginally significant in the PROBIT model (p -value = 0.1).

We also find that the (plan and board) control variables themselves are insignificant. These variables add little if any explanatory power to the models. We confirm this finding using models with the control variables as the only explanatory variables. These models are insignificant (F-test p -value for the OLS model is 0.3, Chi-squared test p -value for the PROBIT model is 0.82).

3. The Effects of Other Firm Characteristics

We also include other firm characteristics in our cross-sectional model. In Models 5 (OLS) and 6 (PROBIT), we control for the level of free cash flow; firm size, as measured by the natural log of net sales; a dummy variable that indicates whether the firm is a public utility, a bank, or an insurance company; and the ratio of market value to book value. We exclude the prior set of (plan and board) control variables because of their insignificance. Again, we find that our results on CEO involvement are robust. The coefficients of NONOM remain negative and statistically significant (p -values of 0.02 and 0.07, respectively for the OLS and PROBIT models). We also note that the coefficients of PAST_RETURN remain negative and become more significant in this specification (p -values of 0.03 and 0.07 in the OLS and PROBIT models, respectively).

Once again, the control variables add little to improve model performance. The only firm characteristic variable that appears to be significant is free cash flow. In Model 5 (OLS), the coefficient of this variable is positive and significant. This finding is consistent with Jensen (1986). Director incentive plans can potentially mitigate the agency costs of free cash flows. But the PROBIT specification fails to support this result.

III. Discussion and Conclusion

In the business press and in academic journals we find prescriptions to better align the interests of directors and shareholders. These prescriptions arise from the perception and fear that boards often rubber-stamp managerial decisions. Shareholder rights activists identify the problem as a lack of correlation between pay and performance for directors.

Robert Monks and Nell Minow, in their book *Corporate Governance* note that

Pay for performance is just as important with directors as it is with executives. As with executive pay, the important question is not “how

much” but “how”...But the important goal here is for directors to have enough of their own financial future at risk to think like shareholders.

We study a sample of 289 firms that propose incentive plans for directors between 1988 and 1998. Although the provision of director incentive pay can enhance the alignment of interests between shareholders and directors, we find that shareholders do not necessarily benefit from the adoption of such plans. This result indicates that in our sample, the implementation of incentive pay plans for directors is ineffective.

We also examine the link between corporate governance and the effectiveness of incentive pay for directors. We use stock price reaction as a proxy for the perceived effectiveness of such plans. We relate the stock price reaction to CEO involvement in director selection, especially when firms have no nomination committees. Under such conditions, we argue that the incentive plans will be ineffective, and therefore less likely to benefit shareholders. Our results support this hypothesis. We find that firms without nomination committees tend to propose director incentive pay plans with terms that are more favorable to the directors, and that market participants react negatively to such plans. Further, this negative market reaction remains even after we control for variables that capture board characteristics, firm performance, plan attributes, and firm characteristics.

Table I. Plan Characteristics by Year of Proposal, 1988-1998

This table gives characteristics for 289 equity-based compensation plans for non-employee directors. A new plan is an equity-based compensation plan for non-employee directors proposed in firms with no existing incentive compensation plan for non-employee directors. We do not consider deferred compensation plans to be incentive compensation plans. We define a gravy plan as a plan that provides directors with additional equity-based compensation without requiring tradeoff in annual retainer. We define option plans as plans that involve the use of options. A majority (143) of the 152 option plans provides directors with periodic annual awards of stock options rather than a one-time award. A restricted share plan indicates either a formal restricted stock plan or an incentive plan involving the use of resale-restricted shares. Stock award plans are plans that involve the use of common stocks. % Vote For the Plan indicates the percentage of shareholders that voted for the plan. Due to missing information in the Investor Responsibility Research Center voting records, we use a total of 284 observations to calculate the % Vote For the Plan.

Year of Proposal	Total Number	New Plan	Gravy Plan	Option Plan	Restricted Share Plan	Stock Award Plan	% Vote For the Plan
1988	14	14	13	11	2	0	89.1
1989	13	11	12	9	3	0	82.4
1990	23	22	21	19	2	2	87.6
1991	34	29	26	19	6	2	89.4
1992	40	29	28	19	11	4	90.4
1993	21	18	17	11	4	3	88.2
1994	21	20	16	12	5	2	92.5
1995	38	21	30	18	3	5	87.32
1996	45	25	28	19	7	11	89.41
1997	21	8	15	7	5	1	91.42
1998	19	8	16	8	1	1	93.37
	289	205	222	152	49	31	89.36

Table II. Firm and Board Characteristics, 1988-1998

This table provides characteristics for the sample of 289 firms that propose equity-based compensation plan for non-employee directors. We base our variables for firm characteristics on Compustat information for the year prior to plan proposal. We obtain stock returns from CRSP. We define free cash flow as undistributed cash flow divided by market value of equity. Operating return is operating cash flow divided by book value of assets. Growth opportunities are the market value of equity plus book value of long-term debt, all divided by book value of assets. We classify a CEO as “involved” if the CEO serves as a committee member when a nomination committee exists, or if the firm does not have a standing committee responsible for director nomination. Sample size varies due to missing observations in Compustat and CRSP.

Variable	N	Mean	Median	Min	Max	S.D.
<i>Panel A. Firm Characteristics</i>						
Net Sales (in million)	280	1,469	209	7	3,9316	4,466
Unadjusted prior stock return over past two years	288	0.29	0.20	-0.97	5.14	0.65
Free Cash Flow	280	0.08	0.07	-1.86	0.46	0.14
Market to book value ratio	280	1.16	0.91	0.07	12.49	1.10
Regulated	289	0.19	--	--	--	--
<i>Panel B. Board Size, Board Composition and Inside Ownership</i>						
Board size	289	10.73	10.00	4.00	22.00	3.23
Fraction of board occupied by outsider	289	0.60	0.61	0.00	0.93	0.18
Fraction of board occupied by insiders	289	0.29	0.27	0.00	0.80	0.15
Fraction of board occupied by gray directors	289	0.11	0.08	0.00	0.62	0.13
Percentage of outstanding equity held by officers and directors	289	9.22%	3.90%	0.1%	95.78%	12.46%
<i>Panel C. Nomination Committee Structure</i>						
CEO does not serve on an existing nomination committee	128	--	--	--	--	--
CEO serves on an existing nomination committee	68	--	--	--	--	--
No nomination committee	93	--	--	--	--	--

Table III. Plan Attributes by CEO Involvement, 1988-1998

This table gives characteristics for 289 equity-based compensation plans for non-employee directors. We define a gravy plan as a plan that provides directors with additional equity-based compensation without requiring tradeoff in annual retainer. Option plans are plans that involve the use of options. A restricted share plan indicates either a formal restricted stock plan or an incentive plan involving the use of resale-restricted shares. Stock award plans are plans that involve the use of common stocks. NoWait is a dummy variable that equals one if the awards of stock options under plan are immediately exercisable, zero otherwise. Research intensity is R&D expenditure over net sales; it is zero if R&D expenditure is not reported separately. Vest_at_Retirement is a dummy variable that equals one if the awards of restricted share will only be vested at the date of the director's retirement; else zero.

	Status of the CEO's involvement in director selection				Test for difference across samples $p(?^2)$	
	All Plans	No Nomination Committee	CEO on the Nomination Committee	NOT on the Nomination Committee	#1 Vs (#2+#3)	Across All Three Groups
		#1	#2	#3		
<i>Panel A. All director incentive plans (n = 289)</i>						
Number of plans	289	93	68	128	--	--
Proportion (number) Of gravy plan	0.77 (222)	0.84 (78)	0.72 (49)	0.74 (95)	0.05	0.14
Proportion (number) Of option plan	0.53 (152)	0.67 (62)	0.43 (29)	0.48 (61)	0.00	0.00
Proportion (number) Of restricted share plan	0.17 (49)	0.09 (8)	0.25 (17)	0.19 (24)	0.01	0.02
Proportion (number) Of stock award plan	0.11 (31)	0.06 (6)	0.10 (7)	0.14 (18)	0.11	0.19
<i>Panel B. Option plans that provides directors with periodic awards (n = 143)</i>						
Number of plans	143	57	27	56	--	--
NOWAIT	0.17 (25)	0.26 (15)	0.15 (5)	0.14 (8)	0.07	0.18
Research Intensity	0.018	0.017	0.018	0.020	0.66 ^a	0.89 ^a
<i>Panel C. Restricted share plans (n = 49)</i>						
Number of plans	49	8	17	24	--	--
VEST_LONG	0.31 (15)	0.13 (1)	0.18 (3)	0.46 (11)	0.07	--
Research Intensity	0.014	0.008	0.010	0.018	0.54 ^a	--

^a $p(F)$ for a standard ANOVA.

Table IV. Event Study Analysis

This table reports three-day cumulative abnormal returns (CARs) surrounding the proxy mailing (-1,1) that contains a proposal of an equity-based compensation plan for non-employee directors. Our sample covers the period 1988-1998. The full sample contains 283 “clean” observations with no confounding news surrounding the proxy mailing (-1,1) event window. We use a standard event study method to test the null hypothesis that average abnormal return is equal to zero. We use the Wilcoxon sign rank test, a non parametric method to test the null hypothesis that the abnormal return has median value equal to zero. We test for equal average and median CARs across sub-samples using standard ANOVA and Wilcoxon rank sum tests, respectively. We use Chi-square test to examine whether the proportion of positive CARs is equal across the subsamples. The table reports p -values for F-statistics for ANOVA ($p(F)$) and Wilcoxon Z-statistic ($p(Z)$) along with ($p(?^2)$).

	Mean CAR (%)	Median CAR (%)	Proportion positive	Number of proposals
<i>Panel A. All proposals between 1988 – 1998</i>				
All proposals	-0.27	-0.33	0.47	283
<i>Panel B. Proposals grouped by the type CEO involvement in the director selection process</i>				
Proposals where a nomination committee does not exists (# 1)	-1.08*	-0.49*	0.41	91
Proposals where a nomination committee exists <i>and</i> the CEO serves on that committee (# 2)	-0.29	0.04	0.51	67
Proposals where a nomination committee exists <i>and</i> the CEO <i>does not</i> serve on that committee (# 3)	0.32	0.01	0.50	125
<i>Panel C. P-values for tests of differences $p(F)$ for mean / $p(Z)$ for median / $p(?^2)$ for proportion positive</i>				
Test for difference between #1 Vs the rest of the sample (i.e., #2 & #3 as a group)	$p(F) = 0.03$ / $p(Z) = 0.05$ / $p(?^2) = 0.12$			
Tests for difference across all groups	$p(F) = 0.05$ / $p(Z) = 0.14$ / $p(?^2) = 0.29$			

* Significant at the 0.05 level

Table V. Cross-Sectional Regression Results

This table provides estimated coefficients (p -value in parenthesis) from six regression models. For OLS regressions, the dependent variable is CAR. We define CAR as the 3-day cumulative abnormal return surrounding proxy mailing (-1,1) that contains a proposal of an equity-based compensation plan for non-employee directors (CAR). For the PROBIT regressions, the dependent variable is POSCAR. POSCAR equals one if CAR is positive; it is zero otherwise. The full sample consists of 273 “clean” proposals with no confounding news surrounding the proxy mailing (-1,1) event window for which information are available from Compustat, CRSP, and proxy statements. A typical proposal may include the ratification of auditor, the election of directors, the proposal of an equity-based compensation for non-employee director, and shareholder proposals.

	Baseline Models		With Plan Attributes & Board		With Firm Characteristics	
	Model 1 ^a	Model 2	Model 3 ^a	Model 4	Model 5 ^a	Model 6
	OLS	PROBIT	OLS	PROBIT	OLS	PROBIT
Intercept	-0.003 (0.300)	-0.037 (0.733)	-0.024 (0.272)	-0.354 (0.400)	-0.013 (0.143)	-0.264 (0.343)
NONOM	-0.014 (0.015)	-0.320 (0.051)	-0.014 (0.012)	-0.319 (0.062)	-0.013 (0.024)	-0.299 (0.071)
PAST_RETURN	-0.011 (0.022)	-0.183 (0.096)	-0.011 (0.018)	-0.191 (0.104)	-0.012 (0.031)	-0.222 (0.070)
Gravy Plan			0.003 (0.557)	-0.017 (0.929)		
New Plan			0.009 (0.205)	0.132 (0.441)		
Fraction of Board Occupied by Outside Directors			0.018 (0.446)	0.333 (0.482)		
Inside Ownership			0.016 (0.413)	0.404 (0.526)		
Free Cash Flow					0.028 (0.001)	0.891 (0.296)
Log(Net Sales)					0.001 (0.186)	0.031 (0.394)
Regulated					-0.006 (0.317)	-0.225 (0.303)
Market to Book Value Ratio					0.001 (0.707)	-0.009 (0.908)
Adjusted R-Squared	0.052		0.051		0.055	
Pseudo R-Squared		0.400		0.402		0.409

^a The Breush-Pagan test rejects the null hypothesis of homoskedasticity for Models 1, 3 and 5 ($p < 0.05$). We use White's (1978) heteroskedastic-consistent standard errors in these models.

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