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## RESEARCH NOTES AND COMMENTARIES

# THE ROLE OF TECHNICAL EXPERTISE IN FIRM GOVERNANCE STRUCTURE: EVIDENCE FROM CHIEF FINANCIAL OFFICER CONTRACTUAL INCENTIVES

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*We provide evidence that the presence of technical expertise in firm governance structure reduces reliance on contractual incentives to control the potential agency problem for executives whose responsibilities require specialized knowledge. Specifically, we find that firms with financial expertise in the form of a board finance committee, or a chief executive officer with a financial background, tend to use lower levels of incentive-based compensation for their chief financial officers. Our findings suggest financial experts provide stronger oversight and/or direction with regard to firm financial policies and strategies, thereby allowing firms to reduce reliance on incentive compensation. Our study provides insight into the role of technical expertise and board committees in firm governance, and into the benefits of common functional expertise within top management teams.* 

## INTRODUCTION

Recent economic events highlight the importance of financial strategy to a firm's success and survival. Complex financial decisions have become an increasingly critical component of the firm's competitive strategy (*Economist*, 2008), leading to greater concern on the part of investors and regulators over the design of chief financial officer (CFO) incentives. This concern is reflected in the Securities and Exchange Commission's (SEC) recent requirement that firms disclose details of CFO compensation in annual proxy statements. The chief executive officer (CEO) and CFO are the only two officer positions for which the SEC specifically requires such disclosure. Given that prior research documents the importance of evaluating executive compensation within the context of firm governance structure, the increased scrutiny placed on CFO compensation raises questions regarding how governance characteristics affect the design of incentives for positions, such as the CFO, that require a high degree of technical sophistication. In this study, we address this issue by examining how the presence (or absence) of financial expertise in the governance structure influences CFO compensation arrangements.

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A substantial literature investigates the relation between monitoring and incentive compensation as alternate solutions to the agency problem resulting from the separation of ownership and control (Jensen and Meckling, 1976; Fama and Jensen, 1983; Eisenhardt, 1989; Beatty and Zajac, 1994; Rediker and Seth, 1995; Mehran, 1995; David, Kochhar, and Levitas, 1998; Sanders and Carpenter, 1998; Hartzell and Starks, 2003; Deutsch 2005; Devers *et al*., 2007). Although there are some conflicting findings, overall these studies document that the presence of monitors with strong incentives, such as independent directors who are subject to reputational labor market concerns (Fama, 1980), tends to reduce the extent of contractual incentives provided to executive officers. While the incentive to monitor is likely an important consideration, in some cases effective monitoring requires a high degree of specialized knowledge in order to evaluate management decisions. For example, without adequate financial training and experience, even motivated directors cannot determine whether the firm's financial policies are appropriate.[1] Relatively little empirical evidence exists, however, regarding how technical knowledge—in this case, financial expertise—in the governance structure allows firms to reduce reliance on incentive compensation.

In addition to being timely, focusing on CFO compensation, as opposed to other members of the management team, offers two significant empirical advantages in examining this question. First, the nature of the officer's technical expertise is fairly well defined (Gates, 1997). This allows us to identify individuals and board committees with the necessary technical expertise to monitor the CFO's decisions. Second, CFO responsibilities are relatively homogeneous across firms. As a result, we can use a broad sample across a range of industries, which allows us to better generalize our findings.

We use two measures to identify whether the firm has financial expertise in its governance structure. Our first measure is the existence of a finance committee of the board of directors. A finance committee is a voluntary committee charged with approving and reviewing a broad range of finance-related policies and strategies for which the CFO is typically responsible.[2] Our second measure is whether the CEO has a financial background. This measure is consistent with Cannella, Park, and Lee's (2008) contention that having common functional backgrounds within a top management team facilitates communication among team members. Thus, a CEO with a financial background is more likely to work with the CFO to determine financial policies and less likely to delegate decision responsibilities to the CFO. We predict that the presence of financial expertise in a firm's governance structure constrains the CFO's ability to act independently and therefore reduces the need to rely on incentive compensation.

A contrary view is that any individual appointed to the board or as CEO has the expertise necessary to evaluate the firm's financial policies. In this case, we would not expect CFO incentives to be associated with our measures of financial expertise. In addition, while the theoretical predictions are derived from agency theory, there is evidence that compensation contracts deviate from agency theory predictions (Baker, Jensen, and Murphy, 1988; Tosi and Gomez-Mejia, 1989; Zajac and Westphal, 1994). Thus, our hypotheses presume that the agency characterization applies to CFO compensation contracts and that our measures capture differences in financial expertise in governance structures.

The sample consists of 1,221 CFO-CEO pairs in the ExecuComp database during the period 1993–2001. We find statistically significant negative associations between the presence of either a finance committee or a CEO with a financial background and CFO incentives, measured alternatively as the *ex ante* incentives of the CFO's equity portfolio (Core and Guay, 1999), the incentives from annual equity grants (Hartzell and Starks, 2003), the value of equity compensation as a proportion of total compensation (Barron and Waddell, 2003), and the *ex post* pay for performance sensitivity (Jensen and Murphy, 1990). To provide further evidence that our findings are specific to

[1] For convenience, we use the term monitoring broadly to include centralized and team decision making. In a strong monitoring environment the principal can direct the agent to take the desired action, or collaborate with the agent in determining the desired action. In a weak monitoring environment, the principal delegates the decision-making authority to the agent with little or no oversight.

[2] Examples include the issuance and sale of securities, dividend policies, approval of borrowings, review of foreign currency exposure, and investment policies. We also provide sample descriptions of finance committee policies in the Appendix.



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the CFO position, we estimate similar specifications for other executive officers. Results for these specifications differ from those for the CFO.

Our empirical findings support the contention that technical knowledge is an important ingredient for effective monitoring (Carpenter and Westphal, 2001; Kroll, Walters, and Wright, 2008). Thus, studies that focus solely on the incentive to monitor potentially miss an important conditioning factor that influences the effectiveness of firm governance. Our study also provides evidence that monitoring and incentive compensation are complementary activities. While some prior studies document evidence consistent with this relationship (Beatty and Zajac, 1994; Rediker and Seth, 1995; David *et al*., 1998; Sanders and Carpenter, 1998), others document contrary evidence (Mehran, 1995; Hartzell and Starks, 2003; Deutsch, 2005). One reason for the conflicting evidence is that governance measures often reflect both monitoring over management's actions, which in theory should reduce incentive compensation, and monitoring over the process of determining the executive's compensation contract, which could increase incentive compensation. By focusing on measures of monitoring over the agent's actions, our study provides a more direct test of the role of monitoring in the use of incentive compensation as a means of addressing agency problems.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### Agency theory

Jensen and Meckling (1976) argue that incentive contracts and monitoring are alternate solutions to the agency problem. According to this theory, investments in monitoring allow the principal to better observe the agent's actions and prevent the agent from taking actions that reduce firm value (Tosi and Gomez-Mejia, 1989; Finkelstein and Hambrick, 1996; Gomez-Mejia and Wiseman, 1997). As a result, stronger monitoring reduces the need to employ performance-based incentive compensation to align the agent's incentives with the principal's objectives.

Evidence supporting this theory has focused on incentives of the monitors. For example, Beatty and Zajac (1994) find the use of incentive compensation is negatively related to the percentage of outside directors on the board, the presence of a major non-board member blockholder, and the separation of the CEO and board chairman positions. Rediker and Seth (1995) study bank holding companies and find that management ownership is negatively associated with the proportion of independent directors. Zajac and Westphal (1994) find that CEO equity holdings are negatively associated with outside director ownership among the largest U.S. firms. Sanders and Carpenter (1998) find a negative relation between the proportion of long-term compensation and the proportion of outsiders on the board, while Engel, Gordon, and Hayes (2002) find a stronger association between CEO pay and performance for firms with little or no venture capital presence.

While the incentive to monitor is an important aspect of the firm's governance structure, vigilance is unlikely to be effective without the necessary knowledge to determine whether the agent's actions maximize firm value. Carpenter and Westphal (2001) suggest that going beyond an emphasis on the board's propensity to engage in decision control and considering whether directors have the relevant experience to effectively exercise control and advise management would advance governance research. Fama and Jensen (1983) and Prendergast (2002) show that specific information on the part of the agent increases the extent of information asymmetry between the principal and agent. As the agent's information advantage increases, firms delegate more decision authority to the agent and increase the amount of incentive compensation to offset the agency problem. Thus, the presence of technical expertise in a firm's governance structure should allow the firm to better monitor the agent's decisions and reduce reliance on incentive compensation.

However, this theory relies on several important assumptions. First, it assumes that the principal sets compensation contracts to maximize firm value. However, there is evidence that strong governance is needed to encourage boards to tie executive compensation to performance. Specifically, Mehran (1995) finds that firms with more outside directors rely more heavily on equity-based compensation, and David *et al*. (1998) document a positive association between pressure-resistant institutional investor ownership and the use of performance-contingent pay. Hartzell and Starks (2003) find that concentrated ownership by institutional investors is associated with greater reliance



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on equity incentives for top executives. Deutsch (2005) notes that outside directors' independence from CEOs enables directors to increase the intensity of performance-contingent pay in CEOs' compensation. Thus, stronger governance could lead to a positive association between governance strength and the use of incentive compensation.

The theory also assumes a traditional agency framework in which the board and CFO negotiate an incentive contract that minimizes the firm's agency costs. If the board uses the contract for symbolic purposes (Zajac and Westphal, 1994), or the CEO influences the CFO's contract in order to achieve other objectives, the theoretical predictions are not clear. In addition, the theory focuses on the extent of incentives in the contract, rather than the amount of compensation. Agency theory assumes that the value of the contract is set by the agent's market opportunities (reservation wage). Thus, we do not address issues regarding how the presence of technical expertise affects the value of the CFO to the firm or the quality of CFO hired.

## Finance committees, CEO financial backgrounds, and CFO compensation

We expect the presence of finance committees to reflect greater financial expertise in firm governance for several reasons.[3] First, because the formation of finance committees is voluntary, firms with finance committees are likely to have individuals on the board with financial expertise. Second, a separate committee charged specifically with evaluating financial decisions should be able to monitor a firm's financial decisions more effectively than the full board. Prior studies demonstrate that board committees are valuable in evaluating firm strategy (Klein, 1998) and in monitoring CEO performance-related behavior (Beekun, Stedham, and Young, 1998). In addition, the full board can be inefficient because large groups are unwieldy, too diverse to form consensus, and susceptible to conflict (Gladstein, 1984; Shaw, 1981; O'Reilly, Caldwell, and Barnett, 1989). Third, the operation of a finance committee requires valuable board member time. Beekun *et al*. (1998) find that board meeting frequency is associated with increased monitoring, and that board efficiency in monitoring varies with its composition and size (Baysinger and Hoskisson, 1989; Finkelstein, Hambrick, and Cannella, 2009).

We also expect a CEO who has a financial background to have a greater degree of financial expertise. The CEO is generally the CFO's direct superior officer in the organization. Although the CEO is ultimately responsible for the firm's strategies, CEOs come from a variety of functional backgrounds, including marketing, production, management, law, and science. As a result, although it is reasonable to assume that individuals promoted to the CEO position have a general understanding of financial matters, it is also reasonable to assume that a CEO with a financial background can evaluate the CFO's decisions more effectively, thereby reducing the agency problem associated with the CFO position.[4]

Rather than considering the CEO-CFO relationship as superior and subordinate in the organizational structure, the CEO and CFO can also be viewed as part of the same management team. Cannella *et al*. (2008) study functional diversity in management teams and argue that common functional backgrounds increase the speed of decision making and improve communication among officers. Thus, a CEO with a financial background is more likely to work with the CFO in developing the firm's financial policies, as opposed to delegating the responsibility to the CFO.[5]

In summary, we expect the finance committee or a CEO with a financial background to review the CFO's decisions more closely and work with the

[3] Anecdotal evidence indicates that finance committees provide additional monitoring over finance-related functions by allowing financial experts to work more intensively in a highly focused area with the opportunity to tackle financial issues on a proactive basis (Garai, 1998). Our conversation with Chuck Lillis, CEO of Media General, confirms that, in contrast to audit committees, which provide *ex post* monitoring of financial reporting, finance committees provide *ex ante* monitoring of CFO actions such as capital purchase decisions and investment returns.

[4] For example, rather than expending the effort to determine an optimal investment portfolio, a CFO could shirk. Because a CEO with financial expertise is more likely to detect the CFO's shirking, the presence of a CEO with a financial background would discourage such behavior. Anecdotal evidence supports the existence of information asymmetry between the CEO and CFO. Gerry Czarnecki, a member of the State Farm board of directors, states, 'Not every CEO has been in the financial function, therefore you may well be financially literate, but you may not be a financial expert, and I think there's a distinction' (Plitch and Ceron, 2003).

[5] There could be a relation between the financial expertise of the CEO and CFO quality. We therefore control for the quality of the CFO in our empirical analysis. In addition, the extent to which a financially savvy CEO uses the CFO to maximize his/her own interests rather than shareholders' would likely add noise to our tests.



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CFO in developing financial policies, thus effectively reducing the delegation of decision authority. Therefore, the presence of financial expertise in the firm's governance structure allows the firm to reduce reliance on CFO contractual incentives. Formally, we test the following two hypotheses (in alternative form):

*Hypothesis 1: Ceteris paribus, the presence of a finance committee is negatively related to the extent of CFO incentives.*

*Hypothesis 2: Ceteris paribus, the presence of a CEO with a financial background is negatively related to the extent of CFO incentives.*

## METHODOLOGY

### Data and sample

Our primary sample begins with 8,191 firm years in the ExecuComp database from 1993–2001 for which we are able to match the CFO with a CEO. We eliminate 1,643 observations from utilities and financial institutions because the governance characteristics in those industries are likely to substantially differ from other industries. To avoid unusual compensation patterns associated with the executive's first year with the firm, we drop 1,743 observations for which a CFO-CEO pair first appears in ExecuComp and for which we are unable to identify CEO backgrounds. We drop 1,177 observations with missing executive compensation, restricted stock, or firm governance data and 125 observations for which we are unable to identify the CFO's position start date or age. As a result, our primary sample consists of 3,503 CFO-years and 1,221 individual CFO-CEO pairs, which averages to 2.87 annual observations per CFO. We obtain market return data from CRSP, financial data from Compustat, executive compensation data from ExecuComp, blockholder data from Compact Disclosure, institutional ownership data from Form 13-F, director independence data from the proxy statements, and CFO age and tenure data from proxy statements and 10-K filings.

We identify finance committees by examining proxy statements, and classify committees with the term 'finance' in the title (such as finance and investment committees) as finance committees. Because the role of some committees is not clear (i.e., joint finance/audit or finance/executive committees), we code joint committees as finance committees if the duties, as listed in the proxy statement, include oversight of the firm's financial transactions and policies. A total of 256 (21.0%) firms have a finance committee.

We hand collect CEO backgrounds by reviewing the proxy statements, 10-K filings, and *Who's Who in Finance and Industry* (Marquis Who's Who, 1995, 1997, 2001) for information on the CEO's work experience. We code the CEO as having a financial background if we find evidence of any of the following: a) Certified Public Accountant designation, b) experience working for a financial services firm (defined as a bank, savings and loan, insurance company, or investment bank), c) experience serving as a CFO, controller, treasurer, or vice president of finance, d) a degree in finance or accounting (including a finance MBA), or e) other financial experience (such as assistant treasurer, assistant controller, etc.). We find a total of 197 (16.1%) firms have a CEO with a financial background.

### Dependent variables

Our first measure of the extent of CFO contractual incentives is based on the sensitivity of the CFO's equity portfolio to changes in firm value (Jensen and Murphy, 1990; Hall and Liebman, 1998; Core, Guay, and Verrecchia, 2003). Equity incentives can be considered *ex ante* incentive measures in that they specify a functional form that relates future stock returns to the manager's wealth. This measure is the log of the change in dollar value of the CFO's equity portfolio for a one percent increase in the firm's market value (i.e., the portfolio delta). We estimate the delta of the CFO's equity portfolio using ExecuComp data following the procedure outlined in Core and Guay (1999).[6]

Our second measure of CFO contractual incentives focuses on the CFO's annual equity compensation. While the portfolio approach has the advantage of capturing the full amount of equity

[6] Specifically, we use option portfolio data to estimate the average exercise price and time to expiration for the options in the CFO's portfolio, and then combine the data with the option valuation assumptions disclosed by the firm to estimate the Black-Scholes sensitivity of the option portfolio to stock price. Finally, we add the change in value of restricted stock held and common shares owned at the end of the year per one percent increase in market value to the option portfolio delta.



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incentives at a point in time, the dependent variable is also influenced by factors such as the manager's trading behavior and changes in share price. To measure the CFO's incentives from annual equity grants, we follow Hartzell and Starks (2003) and use current grants of stock options and restricted stock for a one percent change in firm market value. In addition, following Barron and Waddell (2003), we examine the proportion of total compensation that is equity based. This measure reflects the size of equity grants relative to total compensation and is defined as equity incentives (restricted stock and option grants) divided by total annual compensation (restricted stock, option grants, cash compensation, and other long-term package payouts).

Although equity compensation constitutes a significant part of their incentives, CFOs also have incentives based on cash compensation. To capture non-equity incentives, we follow Jensen and Murphy (1990) and regress changes in CFO pay against changes in the firm's market value to estimate the CFO's pay-for-performance relation. In this specification, CFO pay includes equity, cash, and other long-term annual compensation.

### Control variables

Our study incorporates a set of control variables to capture other factors likely to influence the extent of the underlying agency problem and the use of equity-based compensation. We include several controls for governance characteristics, including the presence of an independent financial expert on the audit committee, the proportion of independent directors (Mehran, 1995), the proportion of common shares controlled by outside shareholders who own at least five percent of the outstanding common shares (Mehran, 1995), and the average percentage of shares held by institutional shareholders (Hartzell and Starks, 2003). We also include controls for the underlying economic and information environment, including firm size and the market-to-book ratio (Core and Guay, 1999; Barron and Waddell, 2003). Because some firms may substitute equity compensation for cash compensation when they are cash constrained (Core *et al*., 2003), we control for leverage and dividend policy (a dummy variable equal to one if the firm did not pay dividends in the surrounding five year period). To control for performance, we include the annual stock return for the prior year (Core and Guay, 1999). We also include the amount of CFO cash compensation to control for differences in CFO quality,[7] and the age and tenure of the CFO to consider the CFO's decision horizon (i.e., Dechow and Sloan, 1991). Finally, we include year and firm fixed effects in all of our regressions.[8]

Because Hausman tests indicate that a correction for finance committee endogeneity is justified, we use firm age as an instrumental variable and estimate a first-stage probit specification of the choice to form a finance committee, and include the Heckman (1979) self-selection correction factor (inverse Mills ratio) in the ordinary least squares (OLS) model.[9] Because mature firms are more likely to enact complex board structures with separate committees (Garai, 1998), firm age is likely to be correlated with the presence of a finance committee. At the same time, it is unlikely that firm age has a direct effect on the extent of CFO incentive compensation.

### Regression models

For each measure of CFO equity incentives, we estimate the following pooled firm and year fixed-effects regression:

$$\text{Equity incentives}_{it} = \alpha_0 + \alpha_1 \text{FC}_i + \alpha_2 \text{CEOBkg}_i + \alpha_j \text{Controls}_{it} + \alpha_m \text{Firm}_i + \alpha_n \text{Year}_t + e_{1it} \quad (1)$$

where i refers to executive i, and t refers to year t. The dependent variable is defined alternatively as the incentive in the CFO's equity portfolio, the incentive from the CFO's annual equity grant, and the proportion of CFO compensation that is equity based. Our hypotheses predict that firms with a finance committee (indicator $FC = 1$) or a CEO with a financial background (indicator $CEOBkg = 1$) use fewer equity incentives to compensate the CFO; or $\alpha_1 < 0$ and $\alpha_2 < 0$.

To assess the impact of financial expertise on the pay-for-performance relation, we estimate the

[7] Controlling for CFO quality helps alleviate concerns that the variation in equity incentives is driven by differences in CFO quality/ability, rather than the hypothesized incentive-monitoring trade-off.

[8] Unreported alternate specifications include stock price volatility, firm complexity, and research and development intensity as additional controls; and cluster standard errors by firm in place of firm fixed effects. Results are consistent with those reported.

[9] See Campa and Kedia (2002) as an example of deriving the self-selection adjustment term.

following regression:

$$\begin{aligned}\Delta\text{TotalComp}_{it} &= \beta_0 + \beta_1\text{FC}_i + \beta_2\text{CEOBkg}_i \\ &+ \beta_3\text{ChgMV}_{it} + \text{ChgMV}_{it} \times (\beta_4\text{FC}_i \\ &+ \beta_5\text{CEOBkg}_i) + \beta_k\text{Controls}_{it} + \beta_m\text{Firm}_i \\ &+ \beta_n\text{Year}_t + e_{2it} \qquad (2)\end{aligned}$$

where:

$\Delta$TotalComp = TotalComp for year t minus TotalComp for year t-1 (in thousands), where TotalComp is defined as the sum of inflation-adjusted salaries, bonuses, the Black-Scholes value of option grants, market value of restricted stock grants, and other long-term benefits granted during year t;

ChgMV = the change in inflation-adjusted market value from year t-1 to year t (in millions), and all other variables are as previously defined.

In this regression, $\beta_3$ represents the dollar gain per \$1,000 increase in firm market value (Jensen and Murphy, 1990). If the presence of financial expertise reduces the firm's reliance on CFO incentives, we expect that $\beta_4 < 0$ and $\beta_5 < 0$.

### Descriptive statistics

Panel A of Table 1 provides pairwise comparisons of the presence of a finance committee and the presence of a CEO with a financial background. We find that firms with a finance committee are less likely to have a CEO with a financial background ($\chi^2 = 3.16$, $p = 0.08$). Panel B of Table 1 provides industry distributions for sample firms with a finance committee and a CEO with a financial background. Our sample includes a higher proportion of manufacturing firms and a lower proportion of service firms than the Compustat population because we require each firm in our sample to list the CFO among the five highest paid corporate officers. Panel C of Table 1 provides financial characteristics of sample firms. The most notable is that firms with finance committees tend to be larger than the average Compustat firm.

Table 2 provides distributions for our variables. The mean (median) value for equity portfolio incentives of \$126,790 (\$40,780) can be interpreted as the dollar change in CFO wealth (in 2001 dollars) for a one percent increase in firm value. The mean (median) value for equity incentives from CFOs' annual grants is \$23,170 (\$6,070). The CFOs' average annual total compensation is \$1,517,660, which includes the Black-Scholes value of stock option grants, the market value of restricted stock grants, other long-term benefits granted, and cash compensation (with a mean value of \$507,700). The mean (median) percentage of outstanding shares controlled by outside blockholders is 28 percent (24%). The mean percentage of independent directors of 63 percent is slightly above the mean percentage reported by Mehran (1995) of 55 percent. Finally, the mean (median) percentage of institutional ownership of 57 percent (59%) for our sample is comparable to the percentages reported by Hartzell and Starks (2003) of 53 percent (55%).

Table 3 presents Pearson and Spearman correlations among the variables. The presence of a finance committee is positively correlated with director independence, the market value of equity, and leverage, and negatively correlated with blockholder ownership and classification as a non-dividend paying firm. In addition, small firms, low growth firms, highly leveraged firms, and dividend paying firms are more likely to have a CEO with a financial background.

## RESULTS

We present the OLS and Heckman model results for the portfolio of equity incentives in Columns (1) and (2) of Table 4, Panel A. The significantly negative coefficients for the finance committee (*FC*) and CEO financial background (*CEOBkg*) indicator variables are consistent with our hypotheses. The estimated coefficient for *FC* in the Heckman model is $-1.101$ ($t = -6.04$) and $-0.200$ ($t = -3.59$) for *CEOBkg*. Results from the Heckman model that controls for self-selection are stronger than those from the OLS model. Our results appear to be economically significant as well. For example, in the Heckman model, estimated CFO equity incentives for firms with finance committees (or CEOs with financial backgrounds) are 33 percent ($\approx e^{-1.101}$) (or 85%) of the incentives for firms without such financial expertise.

The results for tests using the incentives provided by the annual equity grant as the dependent variable are reported in Column (3), and the results for Barron and Waddell's (2003) specification based on the proportion of total compensation that is equity based are shown in Column (4) of



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Table 1. Descriptive statistics for monitoring characteristics

**Panel A**: Number of unique CFO-CEO pairs (% of total sample)

| | FC = 0 | FC = 1 | Total by CEOBkg |
|---|---|---|---|
| CEOBkg = 0 | *800* *(65.5%)* | **224** **(18.4%)** | 1,024 (83.87%) |
| CEOBkg = 1 | **165** **(13.5%)** | *32* *(2.6%)* | *197* *(16.13)* |
| Total by FC | 965 (79.0%) | 256 (21.0%) | 1,221 |

**Panel B**: Industry classification (% of total firm years)

| Industries | FC = 1 | CEOBkg = 1 | Full Sample | Compustat |
|---|---|---|---|---|
| Agriculture, forestry, and fishing | 0.00 | 0.00 | 0.17 | 0.51 |
| Mining | 6.75 | 5.98 | 5.54 | 5.92 |
| Construction | 2.29 | 1.23 | 1.54 | 1.54 |
| Manufacturing | 63.83 | 54.13 | 58.92 | 48.04 |
| Transportation, communications | 5.80 | 4.92 | 3.31 | 7.58 |
| Wholesale trade | 2.56 | 5.62 | 3.57 | 4.63 |
| Retail trade | 10.39 | 9.49 | 11.90 | 7.39 |
| Services | 8.37 | 18.63 | 14.73 | 23.32 |
| Non-classifiable establishments | 0.00 | 0.00 | 0.31 | 1.09 |

**Panel C**: Firm characteristics (mean value)

| Firm characteristics | FC = 1 | CEOBkg = 1 | Full sample | Compustat |
|---|---|---|---|---|
| Total assets | 6754 | 2960 | 3192 | 1627 |
| Market value of equity | 11 194 | 4169 | 5208 | 1881 |
| Leverage | 1.98 | 2.46 | 1.63 | 1.82 |
| Book-to-market | 3.76 | 3.25 | 3.70 | 3.60 |
| Return on equity | 0.15 | −0.04 | 0.01 | −0.23 |
| RD | 0.02 | 0.03 | 0.04 | 0.05 |

Panel A reports the number of unique CFO-CEO pairs by the presence of a finance committee and the presence of a CEO with a financial background. **Bold** (*Italic*) text indicates the frequency is greater (smaller) than expected assuming independence between rows and columns. FC is a dummy variable equal to 1 if the board has a finance committee and 0 otherwise. CEOBkg is a dummy variable equal to 1 if the CEO has a financial background and 0 otherwise.
Panel B reports the number of observations by industry as percentages of total firm years.
Panel C reports mean (median) values of firm characteristics. Total assets are measured as the book value of assets at the end of the year (in $ millions). The market value of equity is computed at the end of the year (in $ millions). Leverage is the book value of debt scaled by the book value of equity at the end of the year. Book-to-market represents the book-to-market ratio of equity at the end of the year. Return on equity is income before extraordinary items scaled by the beginning book value of equity. RD is the value of research and development expenditures scaled by beginning total assets.

Panel A of Table 4. The results are consistent with our findings using portfolio incentives. The presence of a finance committee and a CEO with a financial background are both negatively associated with the provision of annual CFO equity incentives ($t = -3.61$ and $-1.89$, respectively) and the proportion of compensation comprising equity ($t = -2.21$ and $-1.91$, respectively).[10]

We report the empirical estimation of Jensen-Murphy pay-for-performance sensitivities (regression 2) in Panel B of Table 4. Because this requires the *change* in total CFO compensation,

[10] We also estimate a Probit model that measures the likelihood that a given dollar of total compensation is equity based (Barron and Waddell, 2003). Specifically, we duplicate all observations and estimate Barron and Waddell's (2003) weighted Probit model in which the weight for each observation is the proportion of annual equity compensation to total annual compensation. In this test, 216 observations receive zero weight. Non-tabulated results show negative estimated coefficients for both the FC ($t = -1.94$) and CEOBkg ($t = -2.29$) variables.



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Table 2. Distributions of variables used in the CFO incentive compensation models

| Variable | Mean | Standard deviation | 10th percentile | Median | 90th percentile |
|---|---|---|---|---|---|
| Incentives: | | | | | |
| Equity | 126.79 | 516.21 | 6.80 | 40.78 | 224.22 |
| Ln(Equity) | 3.76 | 1.33 | 2.05 | 3.73 | 5.42 |
| Equity_grant | 23.17 | 110.59 | 0.64 | 6.07 | 39.76 |
| Ln(Equity_grant) | 2.06 | 1.27 | 0.50 | 1.96 | 3.71 |
| TotalComp | 1517.66 | 2858.54 | 342.27 | 881.93 | 2823.32 |
| CashComp | 507.70 | 353.86 | 216.37 | 418.15 | 878.73 |
| Independent variables: | | | | | |
| FC | 0.21 | 0.41 | 0 | 0 | 1 |
| CEOBkg | 0.16 | 0.37 | 0 | 0 | 1 |
| AC_Expt | 0.51 | 0.50 | 0 | 1 | 1 |
| Perc5 | 0.28 | 0.24 | 0.00 | 0.24 | 0.59 |
| Indep | 0.63 | 0.18 | 0.40 | 0.64 | 0.86 |
| InstShr | 0.57 | 0.20 | 0.29 | 0.59 | 0.80 |
| MV | 7.19 | 1.54 | 5.39 | 7.02 | 9.21 |
| BkMkt | 0.49 | 0.36 | 0.15 | 0.40 | 0.90 |
| Lev | 0.72 | 0.90 | 0.07 | 0.43 | 1.64 |
| NoDiv | 0.32 | 0.47 | 0.00 | 0.00 | 1.00 |
| LagRet | 0.24 | 0.60 | −0.34 | 0.14 | 0.90 |
| FirmAge | 24.18 | 15.10 | 7 | 21 | 47 |
| CFOAge | 49.93 | 6.98 | 41 | 50 | 59 |
| Tenure | 6.23 | 4.24 | 2 | 5 | 12 |

Table 2 reports descriptive statistics for variables used in the CFO equity incentive regression models. Equity is the change in dollar value (in thousands of 2001 dollars) of the CFO's portfolio of options, restricted stock, and common shares owned at the end of year t for a one percent increase in the firm's market value. Ln(Equity) is the natural log of 1 plus Equity. Equity_grant is the change in dollar value (in thousands of 2001 dollars) of the CFO's grants of options and restricted stock during year t for a one percent increase in the firm's market value. Ln(Equity_grant) is the natural log of 1 plus Equity_grant. TotalComp is the sum of salaries, bonuses, Black-Scholes value of option grants, market value of restricted stock grants and other long-term benefits granted during year t (in thousands of 2001 dollars). CashComp is the sum of salaries and bonuses for year t (in thousands of 2001 dollars). FC is a dummy variable equal to 1 if the board has a finance committee and 0 otherwise. CEOBkg is a dummy variable equal to 1 if the CEO has a financial background and 0 otherwise. AC_Expt is a dummy variable equal to 1 if there is an independent financial expert on the audit committee and 0 otherwise. Perc5 is the percentage ownership by shareholders who own at least five percent of the outstanding common stock. Indep is the proportion of independent directors on the board. InstShr is the percentage of shares held by institutional investors averaged over the four quarters of year t. MV is the log of the inflation adjusted ending market value of equity. BkMkt is the book-to-market ratio of equity at the end of year t. Lev is the book value of debt scaled by the market value of equity as of the end of the year t. NoDiv is equal to 1 if the firm did not issue a dividend during the five years surrounding year t and 0 otherwise. LagRet is the annual stock return for year t-1. FirmAge is the number of years the firm appears in Compustat. CFOAge is the age of the CFO as of year t. Tenure is the number of years that the CFO is in this position as of year t.

we lose one annual observation for each CFO, which reduces the sample to 2,147 observations. Consistent with our prior results, we find significantly negative coefficients for interactions of the change in market value with the *FC* and *CEOBkg* indicator variables. Specifically, the estimated coefficient for the interaction with *FC* is −0.053 ($t = -3.66$) and with *CEOBkg* is −0.077 ($t = -2.46$). The coefficient for the change in market value of 0.094 indicates that the CFOs' pay-for-performance sensitivities for firms with finance committees are approximately 44 percent ($\approx (0.094 - 0.053) \div 0.094$) of those for firms without finance committees, and the CFOs' pay-for-performance sensitivity when the CEO has a financial background is approximately 18 percent of that of CFOs working under CEOs without such backgrounds.

Because prior research documents similar compensation structures among non-CEO executives within the same firm (Henderson and Fredrickson, 2001; Bloom and Michel, 2002), using other executives as a control group provides evidence regarding whether our results are uniquely attributable to the CFO position. We identify executive officers listed in Execucomp who are not CEOs, CFOs, chairmen, or vice chairmen, and report the results in Table 5. In contrast to the CFO findings,



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Table 3. Correlations among independent variables in the CFO incentive compensation models

| | FC | CEOBkg | AC_Expt | Perc5 | Indep | InstShr | MV | BkMkt | Lev | NoDiv | Cash Comp | LagRet | Ln (CFOAge) | Ln (Tenure) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FC | 1 | **−0.059** | **0.137** | **−0.124** | **0.233** | **0.059** | **0.278** | **−0.034** | **0.106** | **−0.190** | **0.184** | **−0.061** | **0.194** | 0.011 |
| CEOBkg | **−0.059** | 1 | **0.062** | −0.016 | 0.025 | **−0.040** | **−0.078** | **0.041** | **0.103** | **−0.041** | **−0.056** | −0.030 | **−0.062** | **−0.047** |
| AC_Expt | **0.137** | **0.062** | 1 | **0.047** | **0.063** | **0.081** | 0.008 | **0.059** | **0.092** | −0.025 | 0.024 | −0.032 | 0.001 | −0.005 |
| Perc5 | **−0.128** | −0.026 | **0.044** | 1 | **−0.140** | **0.035** | **−0.212** | **0.811** | **0.083** | **0.081** | **−0.108** | **0.037** | **−0.074** | −0.009 |
| Indep | **0.238** | 0.026 | **0.055** | **−0.111** | 1 | **0.225** | **0.139** | **−0.039** | **0.041** | **−0.145** | **0.068** | −0.012 | 0.033 | **−0.099** |
| InstShr | **0.057** | **−0.036** | **0.085** | **0.094** | **0.233** | 1 | **0.172** | **−0.062** | −0.007 | **−0.062** | **0.092** | **0.055** | 0.032 | **0.057** |
| MV | **0.270** | **−0.084** | 0.011 | **−0.190** | **0.141** | **0.203** | 1 | **−0.526** | **−0.295** | **−0.165** | **0.589** | **0.165** | **0.185** | 0.009 |
| BkMkt | −0.017 | **0.061** | **0.094** | **0.050** | −0.024 | −0.026 | **−0.520** | 1 | **0.674** | **−0.037** | **−0.144** | **−0.279** | 0.004 | **0.056** |
| Lev | **0.171** | **0.103** | **0.133** | 0.033 | **0.089** | **0.050** | **−0.228** | **0.682** | 1 | **−0.078** | 0.025 | **−0.240** | **0.047** | 0.016 |
| NoDiv | **−0.190** | **−0.041** | −0.025 | **0.090** | **−0.142** | **−0.048** | **−0.168** | **−0.073** | **−0.204** | 1 | **−0.131** | **0.135** | **−0.188** | **−0.046** |
| CashComp | **0.266** | **−0.074** | **0.063** | **−0.129** | **0.129** | **0.203** | **0.663** | **−0.166** | **0.132** | **−0.207** | 1 | **0.046** | **0.169** | **0.074** |
| LagRet | −0.015 | −0.033 | −0.031 | 0.022 | 0.001 | **0.091** | **0.199** | **−0.315** | **−0.271** | **0.069** | **0.085** | 1 | **−0.059** | −0.008 |
| Ln(CFOAge) | **0.198** | **−0.064** | 0.003 | **−0.077** | **0.042** | 0.022 | **0.187** | 0.025 | **0.091** | **−0.185** | **0.288** | −0.022 | 1 | **0.321** |
| Ln(Tenure) | 0.016 | **−0.043** | −0.002 | **−0.009** | **−0.102** | **0.053** | −0.003 | **0.085** | **0.040** | **−0.039** | **0.122** | 0.007 | **0.308** | 1 |

Table 3 reports the Pearson (above the diagonal) and Spearman (below the diagonal) correlations among regression variables. FC is a dummy variable equal to 1 if the board has a finance committee and 0 otherwise. CEOBkg is a dummy variable equal to 1 if the CEO has a financial background and 0 otherwise. AC_Expt is a dummy variable equal to 1 if there is an independent financial expert on the audit committee and 0 otherwise. Perc5 is the percentage ownership by shareholders who own at least five percent of the outstanding common stock. Indep is the proportion of independent directors on the board. InstShr is the percentage of shares held by institutional investors averaged over the four quarters of year t. MV is the log of the inflation adjusted ending market value of equity. BkMkt is the book-to-market ratio of equity at the end of year t. Lev is the book value of debt scaled by the market value of equity as of the end of the year. NoDiv is equal to 1 if the firm did not issue a dividend during the five years surrounding year t, and 0 otherwise. CashComp is the sum of salaries and bonuses for year t (in thousands of 2001 dollars). LagRet is the annual stock return for year t-1. Ln(CFOAge) is the natural log of the CFO's age as of year t. Ln(Tenure) is the natural log of the number of years that the CFO is in this position as of year t.

Table 4. Financial monitoring and CFO incentives

**Panel A**: Portfolio and annual equity incentives

| Independent variable | Probit model predicting FC | Predicted sign | Portfolio of equity incentives (1) OLS model | Portfolio of equity incentives (2) Heckman model | Annual equity grants (3) Ln(Equity grant) | Annual equity grants (4) Proportion of total compensation that is equity-based |
|---|---|---|---|---|---|---|
| FC | | − | −0.297 | −1.101 | −1.067 | −0.161 |
| | | | (−5.18)*** | (−6.04)*** | (−3.61)*** | (−2.21)** |
| CEOBkg | −0.345 | − | −0.155 | −0.200 | −0.170 | −0.041 |
| | (−2.58)*** | | (−2.81)*** | (−3.59)*** | (−1.89)* | (−1.91)* |
| AC_Expt | | − | 0.068 | 0.059 | 0.103 | 0.007 |
| | | | (1.08) | (1.57) | (1.09) | (0.43) |
| Perc5 | −0.593 | + | 0.128 | 0.108 | 0.115 | −0.020 |
| | (−2.37)** | | (2.17)** | (1.84)* | (1.21) | (−0.79) |
| Indep | 1.754 | − | 0.004 | 0.263 | 0.513 | 0.088 |
| | (5.65)*** | | (0.03) | (2.17)** | (2.61)*** | (1.85)* |
| InstShr | −0.362 | + | 0.115 | 0.148 | 0.037 | 0.028 |
| | (−1.30) | | (1.57) | (2.02)** | (2.62)*** | (1.08) |
| MV | 0.199 | + | 0.536 | 0.589 | 0.514 | 0.053 |
| | (5.26)*** | | (31.44)*** | (28.83)*** | (15.51)*** | (6.25)*** |
| BkMkt | −0.163 | − | −0.572 | −0.557 | −0.260 | 0.000 |
| | (−0.72) | | (−9.64)*** | (−9.40)*** | (−2.71)*** | (0.01) |
| Lev | 0.295 | + | 0.041 | 0.082 | 0.088 | 0.008 |
| | (4.05)*** | | (1.92)* | (3.54)*** | (2.33)** | (0.98) |
| NoDiv | −0.543 | + | 0.088 | 0.046 | 0.125 | 0.013 |
| | (−3.94)*** | | (2.48)*** | (1.26) | (1.42) | (0.94) |
| LagRet | | + | 0.184 | 0.177 | 0.055 | 0.108 |
| | | | (10.41)*** | (10.04)*** | (1.93)* | (1.51) |
| CashComp# | | + | 0.426 | 0.435 | 0.496 | |
| | | | (9.34)*** | (9.56)*** | (6.73)*** | |
| Ln(CFOAge) | | + | 0.426 | 0.440 | 0.780 | −0.216 |
| | | | (3.52)*** | (3.65)*** | (3.99)*** | (−4.08)*** |
| Ln(Tenure) | | + | 0.397 | 0.373 | −0.024 | −0.020 |
| | | | (16.06)*** | (14.82)*** | (−0.59) | (−2.13)*** |
| Ln(FirmAge) | 0.318 | + | | | | |
| | (4.32)*** | | | | | |
| Lambda_FC | | + | | 0.494 | 0.471 | 0.056 |
| | | | | (4.65)*** | (2.74)*** | (1.37) |
| Firm fixed effects | | | Yes | Yes | Yes | Yes |
| Year fixed effects | | | Yes | Yes | Yes | Yes |
| N | 1.221 | | 3.503 | 3.503 | 3.503 | 3.503 |
| (Pseudo) Adj.$R^2$ | 0.21 | | 0.67 | 0.69 | 0.48 | 0.23 |
| Equity (FC = 1)/Equity (FC = 0) | | | 74% | 33% | 34% | N.A. |
| Equity (CEOBkg = 1)/Equity (CEOBkg = 0) | | | 86% | 82% | 84% | N.A. |




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Table 4. (*Continued*)

**Panel B:** Pay for performance sensitivity

| | | Estimated coefficient (t-statistic) |
|---|---|---|
| FC | ? | −180.597 |
| | | (−0.57) |
| CEOBkg | ? | 12.321 |
| | | (0.04) |
| AC_Expt | ? | 280.898 |
| | | (1.28) |
| ChgMV | + | 0.094 |
| | | (9.96)*** |
| ChgMV × FC | − | −0.053 |
| | | (−3.66)*** |
| ChgMV × CEOBkg | − | −0.077 |
| | | (−2.46)*** |
| ChgMV × AC_Expt | − | −0.009 |
| | | (−0.68) |
| Firm fixed effects | | Yes |
| Year fixed effects | | Yes |
| N | | 2.147 |
| Adj. $R^2$ | | 0.10 |

Table 4 reports the estimated coefficients (t-statistics) for CFO incentive regression models. In Panel A, the dependent variables are, alternately, the natural log of 1 plus Equity, where Equity is defined as the change in dollar value (in thousands of 2001 dollars) of the CFO's portfolio of options, restricted stock, and common shares owned at the end of year t for a one percent increase in the firm's market value (Models 1 and 2); Ln(Equity_grant) is the natural log of 1 plus Equity_grant, where Equity_grant is the change in dollar value (in thousands of 2001 dollars) of the CFO's grants of options and restricted stock during year t for a $1000 increase in the firm's market value (Model 3); and the proportion of total compensation that is equity-based is defined as the value of annual equity compensation scaled by annual total compensation (Model 4). Lambda_FC is the self-selection adjustment derived from a probit regression that predicts the existence of a finance committee. All other independent variables are defined in Table 2.
In Panel B, the dependent variable is TotalComp for year t minus TotalComp for year t-1, where TotalComp is defined as the sum of salaries, bonuses, BlackScholes value of option grants, market value of restricted stock grants and other long-term benefits granted during the year (in thousands of 2001 dollars). ChgMV is the change in the inflation-adjusted market value for the firm from year t-1 to year t. All regressions include year and industry fixed effects (not reported).
***, **, and * indicate significance level at one percent, five percent, and 10 percent in two-tailed tests, respectively. # indicates coefficients are multiplied by 1,000. All t-statistics are based on the Huber-White robust standard errors.

equity incentives for other executive officers are positively associated with *FC* ($t = 2.02$) and not significantly associated with *CEOBkg* ($t = -0.80$). Therefore, our results are unlikely to be driven by firm-specific omitted correlated variables.[11]

## DISCUSSION AND IMPLICATIONS FOR FURTHER RESEARCH

We document negative relations between CFO incentive compensation and the presence of either a finance committee or a CEO with a financial background. Our evidence is consistent with Kroll *et al.*'s (2008) contention that vigilance needs to be supplemented by knowledge and experience in order to generate an effective monitoring system, and Cannella *et al.*'s (2008) contention that common functional backgrounds enhance communication within top management teams, thereby reducing the delegation of responsibility to the CFO.

Our findings have several implications for future research. First, our evidence highlights the importance of considering functional expertise in evaluating firm governance structure. As such, it supports the contention by Jensen and Zajac (2004) that it is important to distinguish between individual managers and directors within a governance structure. Our findings also have implications for the design of incentives for agents with specialized knowledge, such as research and development employees in high technology industries (Carpenter, Pollock, and Leary, 2003; Yanadori

[11] We estimate similar specifications using chief operations officers in place of non-CEO executives, and find comparable results to those for non-CEO executives.



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Table 5. The relation between financial monitoring and equity incentives for other executive officers

| Independent variable | Predicted sign | CFO incentives | Other executive officers |
|---|---|---|---|
| FC | − | −0.841 | 0.574 |
| | | (−3.03)*** | (2.02)*** |
| CEOBkg | − | −0.245 | −0.121 |
| | | (−2.58)*** | (−0.80) |
| AC_Expt | − | −0.107 | −0.180 |
| | | (−1.51) | (−1.48) |
| Perc5 | + | 0.030 | −0.099 |
| | | (0.29) | (−1.07) |
| Indep | − | 0.296 | 0.043 |
| | | (1.67)* | (0.23) |
| InstShr | + | 0.161 | 0.479 |
| | | (1.28) | (4.15)*** |
| MV | + | 0.672 | 0.765 |
| | | (18.81)*** | (19.68)*** |
| BkMkt | − | −0.334 | −0.356 |
| | | (−3.39)*** | (−4.03)*** |
| Lev | + | 0.126 | 0.062 |
| | | (3.30)*** | (1.60) |
| NoDiv | + | 0.191 | 0.190 |
| | | (3.19)*** | (3.48)*** |
| LagRet | + | 0.001 | 0.001 |
| | | (4.68)*** | (3.83)*** |
| CashComp# | + | 0.534 | 0.893 |
| | | (5.47)*** | (9.02)*** |
| Ln(Age) | + | 0.350 | 0.422 |
| | | (2.54)*** | (1.78)* |
| Ln(Tenure) | + | 0.448 | 0.203 |
| | | (10.59)*** | (5.46)*** |
| Lambda_FC | + | 0.202 | 0.345 |
| | | (1.10) | (2.05)** |
| Firm fixed effects | | Yes | Yes |
| Year fixed effects | | Yes | Yes |
| N | | 1.363 | 2.742 |
| Adj. $R^2$ | | 0.63 | 0.59 |

Table 5 reports the estimated coefficients (t-statistics) for the CFO and other executive officers equity incentive regression models. The dependent variable is the natural log of 1 plus equity, where equity is defined as the change in dollar value (in thousands of 2001 dollars) of the CFO's portfolio of options, restricted stock, and common shares owned at the end of year t for a one percent increase in the firm's market value. Ln(Age) is the natural log of the executive's age as of year t.
All other independent variables are defined in Table 2. All regressions include year and industry fixed effects (not reported). ***, **, and * indicate significance level at one percent, five percent, and 10 percent in two-tailed tests, respectively. # indicates coefficients are multiplied by 1,000. All t-statistics are based on the Huber-White robust standard errors.

and Marler, 2006; Kor, 2006). Finally, our findings shed additional light on the determinants of compensation to individual officers within top management teams (Carpenter and Saunders, 2002).

Our study is subject to important limitations. First, although we find an association between the presence of financial expertise and CFO incentive compensation, our data are not sufficient to assess causality. The relative infrequency of finance committee adoption or removal and new CEO appointment restricts our ability to use time series data to provide stronger causal evidence. Second, although our evidence is consistent with financial expertise substituting for CFO contractual incentives, we do not investigate the factors underlying the choice of relying on governance or incentives. While an examination of the factors driving the choice between governance and incentives and the implications of that choice on future performance is beyond the scope of this study, additional research in this area would extend our understanding of the strategy implications of governance characteristics and incentive compensation.

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## APPENDIX: SAMPLE DESCRIPTIONS OF FINANCE COMMITTEE RESPONSIBILITIES

**Black & Decker Corporation, 1998 proxy statement:**

The Finance Committee, which is currently composed of Anthony Luiso (Chairman), Norman R. Augustine, Barbara L. Bowles, and Malcolm Candlish, met five times during 1998. Its functions include: (1) reviewing financial policies and procedures, operating and financial results, capital expenditures, operating budgets, and proposals for corporate financing, including the issuance and sale of Black & Decker's securities; (2) approving short-term and long-term borrowings in amounts in excess of established thresholds; (3) making dividend recommendations to the Board of Directors; (4) reviewing certain acquisitions, mergers, divestitures, capital expenditures, dispositions of real estate, and foreign currency movements and exposures; (5) reviewing capital expenditure and operating budgets; and (6) overseeing the pension plans of Black & Decker and its subsidiaries.

**Fluor Corp, 1997 proxy statement:**

The function of the Finance Committee is to review and make recommendations to the Board regarding the Company's financing needs and plans and dividend policy, to review and, where delegated by the Board, approve new debt financings, acquisitions and dispositions of business units and major capital assets, to review the financial performance of acquisitions and equity investments and to monitor the investment policy and performance of the Company's employment and other benefit trust funds, and to review the Company's risk management activities, including insurance coverage. The members of the Finance Committee are Martha R. Seger (Chairman), Don L. Blankenship, Carroll A. Campbell, Jr., Thomas L. Gossage, and Lord Robin W. Renwick. The Finance Committee was initially formed on March 11, 1997, and held one meeting during fiscal year 1997.



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