10-2012

The Power of One: Effects of CEO Duality on Compensation Committee Quality and CEO Compensation

Cindy K. Harris
Ursinus College, charris@ursinus.edu

Carol C. Cirka
Ursinus College, ccirka@ursinus.edu

Eric Farris
Ursinus College

THE POWER OF ONE: EFFECTS OF CEO DUALITY ON COMPENSATION COMMITTEE QUALITY AND CEO COMPENSATION

Cindy K. Harris, Ursinus College
Carol C. Cirka, Ursinus College
Eric Farris, KPMG

ABSTRACT

This paper contributes to the corporate governance literature by focusing on how Chief Executive Officer ("CEO") duality and compensation committee quality are related to CEO compensation in the period since passage of the Sarbanes Oxley Act ("SOX"). Unlike research prior to SOX that focused chiefly on committee members' independence, we measure compensation committee quality in two ways. We consider the average number of board directorships held by compensation committee members as well as the proportion of committee members with prior or current CEO duality experience. We introduce the latter variable as a new measure of quality as it has not been utilized in research conducted prior to or since the passage of SOX. Using a sample of 100 2007 Fortune 500 firms, we find that CEO duality does not have a significant effect on CEO compensation. However, we document a positive relationship between average number of directorships and CEO compensation and also find evidence that CEO duality moderates the relationship between our measures of compensation committee quality and CEO compensation.

INTRODUCTION

Shareholders expect boards of directors ("boards") to protect their interests by insuring that management is accountable for their decisions and actions. In short, boards act to reduce or eliminate the principal-agent problem through a variety of mechanisms and processes collectively described as corporate governance – they provide oversight, advice and counsel to the chief executive officer ("CEO"), monitor management's actions and if necessary discipline the CEO (Finkelstein & Mooney, 2003, p. 101). This board function sounds simpler than it is since in reality corporate governance is a "complex web of multiple interactions and relationships among multiple actors in and around the firm" (van Ees, Gabrielsson, & Huse, 2005, p. 5).

Evidence that existing corporate governance structures were flawed emerged during the 1990s, leading to calls for change. This public outrage over corporate fraud led to passage of the Public Company Accounting Reform and Investor Protection Act of 2002 (SOX) or "Sarbanes-Oxley" (United States Congress, 2002). Legislative changes mandated by SOX and subsequent regulations issued by the Securities and Exchange Commission ("SEC") required stricter corporate governance rules designed to increase the quality of oversight by boards of directors. In particular, the SEC regulations affect the composition and responsibilities of the board's compensation committee with its most significant provision mandating that publicly traded firms may not have any "insiders" on the committee; rather, the compensation committee must be composed entirely of independent board directors.

The capacity of a board to monitor management effectively depends on the distribution of power between the board and its CEO (Finkelstein & Hambrick, 2010). An important indicator of CEO power over a board is CEO duality (Baliga & Moyer, 1996; Finkelstein & Hambrick, 1996), a term used to describe a "combined" leadership structure where the same individual holds both the position of board chair and CEO. This contrasts with a "split" leadership structure where the CEO and board chair positions are held by two individuals (Schooley, Renner, & Allen, 2010). Although the intent of SOX was to enhance board oversight as a means to restore investor confidence, the law does not establish any restriction on a CEO also serving as board chair. . The absence of a mandate by SOX to separate the leadership structure raises the question as to whether the presence of CEO duality may undermine the capacity of a board or its compensation committee to carry out its role independently.

A large and rich body of research investigates how CEO duality and board independence impact firm-level outcomes such as financial performance (e.g., Baliga & Moyer, 1996; Iyengar & Zampeli, 2009; Lam & Lee, 2008) and individual-level outcomes such as CEO compensation (Core, Holthausen, & Larcker, 1999; Dorata & Petra, 2008; Fosberg, 1999; Sapp, 2008). Mixed findings from these studies prevent clear conclusions as to whether CEO duality is associated with higher levels of compensation. What is clear is that CEOs continue to receive lucrative, some would argue excessive, compensation and despite calls to separate the two positions and a substantial number of studies on the consequences of CEO duality, many firms continue to be led by individuals who hold both the CEO and chair positions. In the US, CEO duality continues to be the dominant board leadership structure (Chhaochharia & Grinstein, 2007; Lam & Lee, 2008) with about 70% of the largest public US firms being led by dual CEOs for the past 20 years (Giove, Connolly, & Lilienfeld, 2011).

Research that investigates the effect of compensation committee quality on CEO compensation typically relies on data from the pre-SOX period and generally examines the effect of compensation committee independence on executive compensation. (Newman & Mozes, 1999) With the passage of SOX, however, boards and compensation committees must comply with the legislated mandate of director independence, effectively eliminating it as a meaningful measure of board or committee quality. Scholars have begun to examine compensation committee quality using variables other than independence (Sapp, 2008; Sun & Cahan, 2009). Further, recent studies measure the composition and quality of the committee and their effects on CEO compensation directly or in combination with firm performance (e.g., Conyon & Peck, 1998). Little research examines the relationship among these three critical corporate governance variables: CEO duality, compensation committee quality and CEO compensation. In fact, we found the relationship between CEO duality and CEO compensation to be a primary focus in only nine studies prior to the passage of SOX. Research that examines corporate governance in the post-SOX era is just now emerging (e.g., Petra & Dorata, 2008; Sapp, 2008; Switzer & Tang, 2009; Huang, Lai, McNamara, & Wang, 2011; Valenti, 2008). We identified only four published empirical studies that examine the relationship between CEO duality and CEO compensation and only two of those studies use exclusively post-SOX data.

This paper contributes to the corporate governance literature by focusing on how CEO duality and compensation committee quality are related to CEO compensation in the post-SOX period. In particular, we build on the work of Sun and colleagues (2009) to investigate the role that average directorships plays in affecting committee quality and determining CEO compensation. We extend their work by introducing a new measure of committee quality, the proportion of CEO directors on the committee who have prior or current CEO duality experience themselves. First, we examine the impact of corporate governance measures of quality on CEO compensation using post-SOX data. Second, we specifically focus on the quality characteristics of the compensation committee, rather than the corporate board as a whole. Third, we examine CEO duality as a moderator of the relationship between compensation committee quality and CEO compensation.

We organize this paper as follows. We explain our choice of agency theory as the primary conceptual framework to guide our analysis. Next, we briefly review the role of the compensation committee and describe the changes that resulted from SOX as they apply to the committee. We clarify the terminology surrounding "independence" and "quality" as well as CEO duality. We then review the relevant literature on the relationships among CEO duality, CEO compensation and compensation committee quality, present our theoretical model and hypotheses, and describe our research design and findings. We conclude by discussing the implications of our findings for practice and future research and acknowledge our study's limitations.

BACKGROUND

Conceptual Framework

Research on corporate governance relies largely on agency theory although a visible subset of work (e.g. Anderson, Melanson, & Maly, 2007; Boivie, Lange, McDonald, & Westphal, 2011; Davis et al., 1997; Donaldson, 1990) relies on alternative frameworks such as stewardship theory and resource dependence theory. In practice, however, an agency perspective has driven recent legislation such as SOX (Kaufman & Englander, 2005) and corporate governance research is often premised on the assumption that there is an agency problem in corporate control. In other words, because the interests of shareholders and the CEO diverge and CEOs hold positions of power, they are motivated to make decisions and act in ways that advance their personal goals (Jensen & Meckling, 1976). The role of the board is to constrain this self-serving behavior by governing the relationship between the principal (shareholders) and its agent (management) (Erakovic & Overall, 2010) through strong, knowledgeable and independent directors (Bennington, 2010). Therefore, consistent with current thinking, we use agency theory to guide this study.

CEO Duality

The chair of the board has the responsibility to ensure the company is following bylaws and policies established by the organization, develop agendas for board meetings, and guide the board effectively in overseeing management. As the highest ranking manager, the CEO is charged with decision making related to corporate goals, strategies, risks and integrity while collaborating with other top executives. When there is CEO duality, a single individual is accountable for completion of both sets of duties. A CEO who is also chair is potentially less objective since s/he is not only responsible to pursue management's goals but also to oversee and evaluate CEO effectiveness.

While there is good reason for the persistent debate about the desirability of CEO duality, agency theory suggests that the costs of this leadership structure outweigh its benefits. From an agency perspective, CEO duality represents less board control over management and is therefore inappropriate since it restricts the monitoring role of the board, leads to greater inherent risk (Dickins, 2010), CEO entrenchment (Kim, Al-Shammari, Kim, & Lee, 2009; Pfeffer, 1981), increased information asymmetry (Kim et al., 2009) and lower firm performance. But, without CEO duality, it is more difficult to assign responsibility for [the firm's] poor performance, increases the costs of information sharing, and limits the CEO's authority to make critical decisions and move rapidly to enhance shareholder returns. Opponents of CEO duality believe it may enable the CEO to achieve an elevated position of power and argue that it leads to CEO entrenchment, which "occurs when managers gain so much power that they are able to use the firm to further their own interests rather than the interests of shareholders" (Hermalin & Weisbach, 2003).. Advocates of CEO duality cite the value added as a result of a single, unified leadership position and argue that adequate independent oversight of management can be achieved through other appropriate board mechanisms, measures and activities.

Quality of Compensation Committees

Companies may have different names for the committee but its fiduciary role is essentially the same regardless of its title. Deloitte (2009) describes the practice of the compensation committee as "…to set appropriate and supportable pay programs that are in the organization's best interests and aligned with its business mission and strategy…" Further, as stated in the 2010 Intel proxy, the committee also:

> "reviews and determines various other compensation policies and matters, including making recommendations to the Board and to management related to employee compensation and benefit plans, making recommendations to the Board on stockholder proposals related to compensation matters, and administering the employee stock purchase plan" (Intel, 2010).

Most researchers agree that the compensation committee plays a crucial role in setting both the amount and mix of CEO pay (Barkema & Gomez-Mejia, 1998). The overarching goal is for a quality committee to carry out its monitoring responsibilities objectively to insure that "executive compensation packages are designed to align the incentives of executives and a firm's stakeholders" (Sapp, 2008, p. 711). In reality, the "CEO and the Board frequently have relationships with one another allowing the potential for inter-personal relationships and other factors to influence the executive compensation process" (Sapp, 2008, p. 717).

High quality governance can effectively offset the agency problem if the board is independent. As Fama and Jensen argued in their seminal paper (1983), the function of monitoring management and settling decision disputes is performed best by directors who are independent from management and who are decision experts (Mace, 1986) including insiders who have knowledge and expertise of the corporation's activities (Schooley et al., 2010). SOX requires increased board independence to provide more protection for shareholders, a mandate that reflects an agency perspective (Schooley et al., 2010). Included in these regulations is the requirement that the compensation committee may not have any "insiders"; rather, the committee must be composed entirely of independent board directors. This change is noteworthy because it impacts the actual composition of compensation committees as well as scholarship that examines how compensation committee characteristics are related to CEO compensation.

Studies that investigate compensation committee quality using measures other than independence and that use post –SOX data are few. (Sapp, 2008) Sapp's (2008) work is notable because although his data are taken from both the pre-SOX and post-SOX periods, he moved beyond independence to assess compensation committee quality and examine corporate governance variables in relation to total executive compensation packages. He found that an increase in the percentage of current CEOs on the compensation committee is associated with an increase in CEO compensation. Sapp asserts this stems from the condition of "an increase in the closeness of the compensation committee to the CEO (more CEOs on the compensation committee means the Board is more likely to relate to the concerns of the CEO and thus may be willing to pay the CEO more...") (741). Using pre-SOX data from US firms in 2001, Sun and Cahan (2009) studied committee quality using compensation committee size and individual committee member characteristics in relation to executive pay. Their measurement of member characteristics included years of board experience both with the company and on other boards, corporate ownership, and whether appointed by the CEO, Their results show that CEO cash compensation is more positively associated with accounting earnings when firms have high compensation committee quality. In sum, despite the fact that ten years have elapsed since the passage of SOX and its mandate for an independent compensation committee, relationships among CEO duality, compensation committee quality and CEO compensation remains understudied.

THEORETICAL MODEL AND HYPOTHESES

Based on prior research and the argument posited by agency theory, we propose the following theoretical model of the relationships among CEO duality, compensation committee quality and CEO compensation:

CEO Compensation = f (CEO duality, Compensation Committee Quality, Compensation Committee Meetings, Compensation Committee Size, Financial Performance, Industry)

Diagram 1 provides a visual aid of the relationships we are testing. See Diagram 1 in the appendix.

Given the conflicting perspectives on the desirability of CEO duality, we examine its effect on compensation in the post-SOX period. Consistent with agency theory, we hypothesize it is positively associated with CEO cash compensation. When there is CEO duality, the CEO's compensation is more likely to reflect not only accounting performance and stock returns but also the effect of the CEO's influence on the compensation committee through his or her combined and entrenched role in the company.

H1: CEO duality is positively associated with CEO cash compensation.

Research conducted prior to the enactment of SOX frequently used independence as a measure of compensation committee quality and results were mixed (e.g., Anderson & Bizjak, 2003; Newman & Mozes, 1999; Vafeas, 2003). Calls in the post-SOX period to identify "…a broader and richer set of variables related to the structure and composition of the compensation committee" (Sun & Cahan, 2009, p. 193) have increased given the legislative and regulatory mandate aimed at increasing committee quality by requiring all members to be independent.

Findings from studies that examine variables other than independence suggest that higher quality oversight by the compensation committee depends on members' available time, experience and expertise (e.g., Petra & Dorata, 2008; Sun & Cahan, 2009; Sun, Cahan, & Emanuel, 2009). Directors on one firm's compensation committee who also hold directorships with other companies are likely to be very busy. To the extent that multiple compensation committee members hold other directorships they will have less time to fulfill their oversight function and in turn committee quality will be reduced. Compared to the robust literature on the effects of independence on boards, less is known about the consequences for corporate governance when board members are busy due to outside commitments. There is some evidence to suggest that busy directors shirk responsibilities leading to weaker corporate governance in the form of lower committee quality and higher CEO cash compensation (Core et al., 1999; Fich & Shivdasani, 2006; Larcker, Richardson, & Tuna, 2007; Sun & Cahan, 2009; Sun et al., 2009). In contrast, Ferris and colleagues (2003) do not find any evidence that busy directors shirk their responsibilities.

Another notable determining indicator of committee quality would be members' experience and expertise on the subject of executive compensation. Holding multiple directorships could give directors opportunities to increase their expertise as well as greater incentive to effectively monitor since their reputation as a decision expert is on the line (Fama & Jensen, 1983; Shivdasani & Yermack, 1999). Agency theory suggests that too many directorships, the "busy board member hypothesis," will lower directors' effectiveness as monitors. Some research finds support for this argument (e.g., Fich & Shivdasani, 2006); however, findings are not consistent (e.g., Klein, 1998; Weir, Laing, & McKnight, 2002). In a study that explicitly focuses on the number of directorships and CEO compensation, Sun and colleagues (2009) found that a larger average number of directorships leads to lower CEO compensation. While a certain amount of expertise and prestige is derived from multiple directorships, the loss of time and commitment that can accompany numerous appointments can cancel out the benefits. It is possible that busy directors can enhance committee quality; however, the stronger argument in our view is that when committee members hold multiple directorships the committee's quality is reduced.

H2a: The average number of directorships held by compensation committee members is positively associated with CEO cash compensation, indicating lower compensation committee quality.

When compensation committee members also hold the position of CEO in their own firms, their business leadership experience and expertise can enhance governance quality. Carpenter & Westphal (2001) argue that directors who have prior rather than concurrent CEO experience at other firms are able to better evaluate potential CEOs. Similarly, when more members of the compensation committee have CEO experience, the quality of oversight carried out in granting CEO compensation may be enhanced because the compensation committee is of higher quality. The impact of higher quality corporate governance is that the CEO's compensation may be more closely associated with accounting and stock return measures of the firm than in a situation with lower committee quality. Further, when these CEO committee members also have prior or current CEO duality experience, their objective and independent oversight role may be further strengthened, enhancing the quality of the compensation committee.

As a homogeneous and cohesive collection of individuals (Useem, 1984), when CEOs of other firms sit on a board's compensation committee, some posit that they may identify and empathize with the firm's CEO resulting in more support for favorable pay decisions and lower governance quality (Daily et al., 1998; Lorsch & MacIver, 1989; Sun & Cahan, 2009; Sun et al., 2009). Fahlenbrach et al. (2008) failed to find evidence for what they term the "buddy hypothesis" in their study of CEOs who sit on boards; however, as Sun et al. (2009) point out, there is virtually no work that examines specifically the effects of members of the compensation committee who are also CEOs. A strong case can be made that compensation committee members who themselves have CEO experience might be more effective members because of their expertise and reputation (Sun et al., 2009). Taking it one step further, when a compensation committee has a larger proportion of members with prior or current CEO experience in which they also had CEO duality, the experience and expertise of those members enhances committee quality.

H2b: The proportion of compensation committee members who have prior or current CEO duality experience is negatively associated with CEO cash compensation, indicating higher compensation committee quality.

Hypotheses 2a and 2b test whether attributes of compensation committee quality affect CEO compensation. However, we expect CEO duality to moderate the strength of both of these relationships. The interactive effect of the average number of directorships of the compensation committee and CEO duality on CEO compensation has not been tested in prior studies. Likewise, the interactive effective of committee members' CEO duality experience and CEO duality has not been examined in prior research.

While we expect the average number of directorships of the compensation committee to be positively associated with CEO cash compensation (*H2a)*, the presence of CEO duality will weaken this positive relationship, strengthening the quality of the committee. In this case, compensation committee members who serve as directors on a greater number of boards will be affected by the presence of a dual CEO and will act more judiciously in their governance of the dual CEO's compensation. Thus we hypothesize the following:

H3a: CEO duality weakens the positive relationship between average number of outside directorships held by compensation committee members and CEO cash compensation.

While we expect the proportion of compensation committee members who have prior or current CEO duality experience to be negatively associated with CEO cash compensation (*H2b)*, the presence of CEO duality will weaken this negative relationship, reducing the quality of the committee. In this case, compensation committee members who have CEO duality experience are expected to be less judicious in their governance of CEO compensation because they align more with the dual CEO. Given their similar experience and perspective, the objectivity of committee members will be compromised in setting CEO cash compensation. Therefore we hypothesize the following:

H3b: CEO duality weakens the negative relationship between the proportion of compensation committee members with prior or current CEO duality experience and CEO cash compensation.

REGRESSION MODELS

Model 1: ln (CashSalary2008) = $B_0 + B_1$CEO duality + B_2 Compensation Committee Quality

(*CompCommitteeMemberDuality, AverageDirectorships)* + B_3Compensation Committee Meetings + B_4Compensation Committee Size + B_5Financial Performance (*ROE %, Sales (log))* + B_6Industry

Model 2: ln (CashSalary2008) = B_0 + B_1CEO duality + B_2 Compensation Committee Quality (*CompCommitteeMemberDuality, AverageDirectorships)* + B_3Compensation Committee Meetings + B_4Compensation Committee Size + B_5Financial Performance (*ROE %, Sales (log))* + B_6Industry + B_7*CEOduality*CompCommitteeMemberDuality* + B_8*CEOduality*AverageDirectorships*

METHOD

Sample Selection

The data set consists of 100 randomly selected 2007 Fortune 500 Companies. Fortune 500 companies are used because their larger executive compensation packages have caused the recent controversy regarding the level of CEO compensation. All 500 companies were assigned a random number. The first 100 firms with the lowest assigned random number that met the criteria for the study were selected. In total there were 184 exclusions out of 284 Fortune 500 companies that were examined. A summary of the exclusions is provided in Table 1. See Table 1 in the appendix.

Financial and public utility companies are excluded because the regulation of those industries may mask the efficiency differences across firms within the industry (Vafeas, 2003). Due to the economic events during the latter part of 2008, we include only companies with a fiscal year end of December 31, 2007, thereby avoiding fluctuations in financial results for firms with fiscal years ending in 2008. Also if there was a change in CEO or CEO duality status between 2007 and 2008, the company is excluded from the sample. These eliminations are made to ensure the consistency of the CEO and their position within the firm. There are a variety of factors included in “Miscellaneous Exclusions” such as a mid-year change in compensation committee composition. “Multiple Exclusions” refers to circumstances in which a company is excluded from the sample for more than one reason, such as being a financial company with a fiscal year end in September.

Dependent Variable

CEO Cash Compensation. *CashSalary2008* is the dependent variable and captures the cash component of CEO compensation in calendar year 2008. The log of cash compensation is used so that the difference in magnitude of compensation across companies is reduced, and it is more likely the variable has a normal distribution (Sun & Cahan, 2009). CEO cash compensation was obtained from each company’s 2008 proxy statement. Similar to prior studies of executive compensation, we use cash compensation since it reflects current CEO performance rather than future performance, thus representing the immediate reward component of compensation (Sun & Cahan, 2009). Based on previous studies using agency theory as the framework for executive compensation, cash compensation helps align the interests of stockholders and executives through monetary incentives.

Independent Variables

CEODuality represents whether or not the CEO of the corporation is also the board chair in 2007. *CEODuality* is a dummy variable where ‘1’ signifies that CEO duality exists and ‘0’ signifies split leadership. This information was gathered by examining disclosures on company websites and its 2007 and 2008 annual reports. The CEO duality status was verified over these two years to ensure consistency of the individual serving in that capacity in both years.

Compensation Committee Quality. We measure the quality of the compensation committee using two variables: the average number of directorships held by committee members (***AverageDirectorships)*** and the proportion of compensation committee members with prior or current experience as a CEO with duality (***CompCommitteeMemberDuality***). *AverageDirectorships* is determined using the weighted average number of other board directorships held by members of the compensation committee in 2007. This variable is calculated by dividing the sum of current other directorships held by all compensation committee members by the total number of members serving on the committee. Information about current other directorships was gathered from committee members’ biographies provided in the company’s proxy statements. *CompCommitteeMemberDuality* represents the proportion of compensation committee members (in 2007) who either have prior or current experience serving as both CEO and board chair of a company. This variable is calculated by dividing the total number of CEOs on the committee who have prior or current CEO duality by the total number of committee members.

Control Variables

Consistent with prior research on executive compensation, we include control variables in our analysis. The variable ***Meetings*** measures the number of compensation committee meetings held during the calendar year 2007. This information is reported in the company proxy statements. ***CommitteeSize*** represents the number of directors serving on the compensation committee in 2007 and is also reported in proxy statements. Prior studies examine the size of the board in relation to CEO compensation (e.g., Agrawal & Knoeber, 1999; Core et al., 1999). Since this study examines the effect of compensation committee quality on executive compensation, we use the size of the compensation committee rather than the size of the entire board. ***Return on Equity ("ROE")*** measures the financial performance using the percentage return for the calendar year 2007. Controlling for company size, ***Sales*** represents the log of sales of the company for the fiscal year 2007. *ROE* and *Sales* data were obtained from the Mergent Online database. ***Industry*** represents the company's classification according to the Standard Industrial Classification (SIC), also obtained from the Mergent Online database. The five industries used are mining, manufacturing, communication, retail and service. Each industry is represented by a dummy variable for that industry and the service industry is withheld from the model for comparison purposes.

RESULTS

Descriptive Statistics

Table 2 presents a summary of the descriptive results for the sample data collected. Table 3 presents a breakdown of the sample by industry. Table 4 summarizes the correlations among the study variables. See Tables 2, 3 and 4 in the appendix.

The average CEO cash salary in 2008 was $1,168,191. Seventy percent of the corporate CEOs in the sample had CEO duality, consistent with the findings of Giove, Connolly, and Lilienfeld in 2011. Forty-two percent of compensation committee members had either prior or current CEO duality experience. The average number of compensation committee meetings was 6.46 times per year, somewhat higher than previously documented by Vafeas (2003). This higher meeting frequency is likely the result of greater emphasis placed on corporate governance since the passage of SOX. The average compensation committee size was 4.30 members, a result that is comparable to the average of 4.37 members found by Vafeas (2003). Each compensation committee member in our sample held on average just over 1.62 other board directorships. .

Model 1 Empirical Results

Table 5 presents regression results (Model 1) for study variables excluding the interaction terms. Table 6 includes the interaction terms in the regression analysis. See Tables 5 and 6 in the appendix.

Model 1 results summarized in Table 5 do not support Hypothesis 1, as there is not a statistically significant association between CEO duality with CEO cash compensation (B = .138; *p*=.176). Thus, whether there is split leadership or CEO duality has no bearing on CEO cash compensation in this sample. The results support Hypothesis 2a, since an increase by one in the average number of directorships (*AverageDirectorships*) leads to a 14.9% (B = .149; *p*=.008) increase in CEO cash compensation. This rise in compensation supports the argument that when a compensation committee member holds more directorships, the member may be less effective in carrying out their oversight role, thereby resulting in lower governance quality.

Hypothesis 2b is not supported by Model 1 empirical findings. We expected the proportion of compensation committee members with prior or current CEO duality experience to be negatively associated with CEO cash compensation, indicating higher compensation committee quality. Although the variable *CompCommitteeMemberDuality* is marginally statistically significant (*p* = .082), the coefficient is positive (*B*=.299). An increase by 10% in the proportion of compensation committee members with duality is associated with an increase in CEO compensation of 2.99%. Thus, when there are more committee members with prior or current CEO duality experience, it is likely that close inter-personal relationships between the CEO and those committee members compromise the objectivity of committee members, resulting in weaker governance over executive compensation.

Results for control variables in Model 1 are as follows: 1) meetings (*B* = .039; *p* = .031), 2) ROE (*B* = - .004; *p* = .029), 3) log of sales (*B* = .075; *p* = .102) and 4) the communication industry (*B* = - .483; *p* = .010). Committee size and other industries did not have significant coefficients. The R squared for Model 1 is .363 and the Adjusted R squared is .284.

Model 2 Empirical Results

Model 2 tests Hypotheses 3a and 3b by adding two interaction terms to Model 1. The change in Adjusted R squared from Model 1 to Model 2 (.047) is significant at the .05 level (F-change p = .036). Consistent with Model 1, the effect of CEO duality on CEO cash compensation is statistically insignificant (B = .328, p = .144). Likewise, the coefficient for *AverageDirectorships* is significant and positive (B = .278, p < .0001) indicating that when the average number of directorships held by members of the compensation committee increases, so does CEO compensation. However, the coefficient for *CompCommitteeMemberDuality* is not statistically significant (B = -.255, p = .479) in Model 2.

Hypothesis 3a is supported. We expected that as a moderator, CEO duality would weaken the positive relationship between average number of directorships held by compensation committee members and CEO cash compensation, thereby strengthening the quality of the committee. The coefficient of the interaction term *CEODuality*AverageDirectorships* (B = -.252, p = .022) reflects a significant and strong negative association with CEO cash compensation. It indicates that in the presence of CEO duality, as the average outside directorships increases, CEO compensation decreases. Thus, the presence of CEO duality as a moderator strengthens the quality of the compensation committee as hypothesized. Given CEO duality, compensation committee members with more directorships tend to be more judicious in their governance of executive compensation. The net result is that while CEO compensation increases by 27.8% when average directorships increases by one, this increase is reduced to only 2.6% in this sample when there is CEO duality.

Hypothesis 3b receives marginal support. We expected that as a moderator, CEO duality would weaken the negative relationship between the proportion of compensation committee members with prior or current CEO duality experience and CEO cash compensation. The coefficient of the interaction term *CEODuality*CompCommitteeMemberDuality* (B = .690, p = .089) reflects a marginally significant positive association with CEO cash compensation. This outcome suggests that the presence of CEO duality as a moderator weakens the quality of the compensation committee in its oversight of CEO compensation. That is, when a higher proportion of compensation committee members themselves have CEO duality experience, in the presence of a company with CEO duality, those committee members may tend to align with the corporate dual CEO. This alignment compromises their objectivity in carrying out the committee's responsibilities in setting CEO compensation and may reflect closer inter-personal relationships.

CONCLUSION

This study investigates the effects of CEO duality on compensation committee quality and CEO cash compensation in the post-SOX period. Unlike research prior to SOX that focused chiefly on committee members' independence, we measure compensation committee quality in two ways. We consider the average number of board directorships held by compensation committee members as well as the proportion of committee members with prior or current CEO duality experience. We introduce the latter variable as a new measure of quality as it has not been utilized in research conducted prior to or since the passage of SOX. Further, we examine whether CEO duality moderates the relationship between these measures of compensation committee quality and CEO compensation.

In establishing the requirement that all members of the compensation committee be independent, the intent of SOX legislation and related SEC regulations was to improve the committee's governance quality. However, CEO duality was not prohibited for public companies subject to these rules. Consistent with agency theory, this condition could undermine the ability of compensation committee members to act objectively and independently in setting CEO compensation. Their decision making may unduly favor the dual CEO rather than represent the best interests of stockholders by rewarding the CEO based on the firm's financial performance under the CEO's leadership.

Our findings do not support our hypothesis that CEO duality is associated with higher levels of CEO cash compensation. However, we present evidence that CEO duality moderates the effects of measures of committee quality, in both instances weakening the impact of these measures. First, the positive relationship between average number of directorships held by compensation committee members and CEO compensation is reduced in the presence of CEO duality, suggesting CEO duality strengthens committee quality. This outcome indicates that when there is a dual CEO, committee members with more directorships are inclined to make more careful compensation package decisions in order to protect against the tendency of the dual CEO to influence those decisions in his or her favor. Thus, in this situation, CEO duality is a factor that enhances corporate governance by offsetting the tendency of "busy" committee members with more directorships to otherwise relax their oversight. Second, we document a positive relationship between committee members' CEO duality experience and CEO compensation. This finding is not what we expected and suggests that the "buddy hypothesis" may warrant further investigation. Further, in the presence of CEO duality, we also note this positive association with CEO compensation is increased, which represents a further weakening of compensation committee quality. This outcome indicates that when there is a dual CEO, committee members with prior or current CEO duality experience are inclined to relax their objective oversight of compensation decisions, reflecting their tendency to align with the dual CEO. Thus, CEO duality in this circumstance is a factor that compromises effective corporate governance by the compensation committee, leading to higher CEO cash compensation.

Like any study, we recognize that our research has some limitations. First, our study uses sample data of 100 firms drawn from only the largest companies in the United States. It is unclear whether our findings can be applied to firms of all sizes or generalized to firms operating in other countries. In addition, this relatively small sample size may be one explanation for the lack of findings in the case of CEO duality's influence on CEO compensation or the marginally significant findings in the case of several other variables, including CEO duality's moderating influence. Future research may explore the effect of compensation committee quality on CEO compensation using data from firms of varying sizes as well as from international firms. In addition, future testing of our hypotheses on a larger sample across multiple years may yield different results.

Another limitation is the possibility of omitted variables that may influence CEO cash compensation. These variables could include other CEO characteristics besides CEO duality, other corporate governance quality measures of the compensation committee, and other financial performance measures. Future research should incorporate these additional characteristics. The use of cash compensation is another limitation of the study that could be overcome by including additional components of the CEO's compensation package such as bonuses or equity holdings. Finally, we combined into a single variable the compensation committee members with prior or current CEO duality experience. Future research may refine the analysis by separating those committee members with prior CEO duality experience from those members who are currently serving as a dual CEO. These changes to future research designs might yield more conclusive findings.

However, this study contributes theoretically and practically to the field of corporate governance and in particular has implications for future research on CEO duality, compensation committee quality and CEO compensation. First, by utilizing post-SOX data, our research expands the examination of compensation committee quality beyond the narrower pre-SOX measure of committee independence. Second, we examine a new measure of committee quality, which is the prior or current CEO duality experience of compensation committee members. Consequently, our research contributes to prior literature built on agency theory related to the influences on the compensation committee in setting CEO compensation.

We find the impact of CEO duality on compensation committee quality to be a double-edged sword. Our results indicate that CEO duality may undermine the capacity of the committee to carry out its role independently, when a greater proportion of committee members have prior or current CEO duality experience. Given the higher CEO compensation rewarded in this circumstance, committee members execute less effective oversight since those with CEO duality experience may be less likely to oppose the firm's dual CEO as a sign of support of a colleague (Daily, 1998). In contrast, we observe that CEO duality may strengthen the committee's quality in setting CEO compensation, since members with multiple board directorships who might otherwise be distracted respond to the dual CEO by carrying out more judicious oversight in setting CEO compensation. Thus, given the mixed results on the effect of CEO duality on compensation committee quality in determining CEO compensation, our work extends the debate regarding the desirability of CEO duality.

WORKS CITED

Agrawal, A., & Knoeber, R. (1999). *Outside directors, politics, and firm performance.* North Carolina State University.

Anderson, D., Melanson, S. J., & Maly, J. (2007). The evolution of corporate governance: Power redistribution brings boards to life. *Corporate Governance , 15* (5), 780-797.

Anderson, R., & Bizjak, J. M. (2003). An empirical examination of the role of the CEO and the compensation committee in structuring executive pay. *Journal of Banking and Finance , 27*, 1323-1348.

Baliga, B., & Moyer, C. (1996). CEO duality and firm performance: What's the fuss? *Strategic Management Journal , 17* (1), 41-43.

Barkema, H., & Gomez-Mejia, L. R. (1998). Managerial compensation and firm performance: A general research framework. *Academy of Management Journal , 41* (2), 135-145.

Baysinger, B., & Hoskisson, R. E. (1990). The composition of board of directors and strategic control: Effect on corporate strategy. *Academy of Management Review , 15*, 72-87.

Bennington, L. (2010). Review of the corporate and healthcare governance literature. *Journal of Management & Organization , 16*, 314-333.

Boivie, S., Lange, D., McDonald, M. L., & Westphal, J. D. (2011). Me or we: The effects of CEO organizational identification on agency costs. *The Academy of Management Journal , 54* (3), 551-576.

Braun, M., & Sharma, A. (2007). Should the CEO also be chair of the board? An empirical examination of family-controlled public firms. *Family Business Review , XX* (2), 111-126.

Carpenter, M., & Westphal, J. D. (2001). The strategic context of external network ties: Examining the impact of director appointments on board involvmeent in strategic decision making. *Academy of Management Journal , 44*, 639-660.

Chhaochharia, V., & Grinstein, Y. (2007). Corporate governance and firm value: The impact of the 2002 governance rules. *The Journal of Finance , 62* (4), 1789-1825.

Conyon, M., & Peck, S. J. (1998). Board control, remuneration committees and top management compensation. *Academy of Management Journal , 41*, 146-157.

Core, J., Holthausen, R. W., & Larcker, D. F. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics , 51*, 371-406.

Daily, C., & Dalton, D. R. (1997). CEO and board chair roles held jointly or separately: Much ado about nothing? *Academy of Management Executive , 11* (3), 11-20.

Daily, C., Johnson, J. L., Ellstrand, A. E., & Dalton, D. R. (1998). Compensation committee composition as a determinant of CEO compensation. *Academy of Management Journal , 41*, 209-220.

Davis, J., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *The Academy of Management Review , 22* (1), 20-47.

Deloitte. (2009). *Compensation Committee.* Retrieved October 15, 2009, from Deloitte: http://www.corpgov.deloitte.com/site/us/compensation-committee/;jsessionid=dDhpL6TNDCDvPfFrQtKjqpNWSdnTmBJ1sByywrl2CC38W9fKL0TT!-487353640!-55528549

Dickins, D. (2010). CEO and COB duality: Does it matter? *Internal Auditing , 25* (4), 35.

Donaldson, L. (1990). The ethereal hand: Organizational economics and management theory. *Academy of Management Review, 15:*369-381.

Dorata, N., & Petra, S. T. (2008). CEO duality and compensation in the market for corporate control. *Managerial Finance , 34*, 342-353.

Erakovic, L., & Overall, J. (2010). Opening the 'black box': Challenging traditional governance theorems. *Journal of Management & Organization , 16*, 250-265.

European Corporate Governance Institute. (1992). *The Report of the Committee Financial Aspects of Corporate Governance.* London: Gee and Co.

Fahlenbrach, R., Low, A., & Stulz, R. (2008). *Why do firms appoint CEOs as outside directors?* Ohio State University.

Fama, E., & Jensen, M. (1983). Separation of ownership and control. *Journal of Law and Economics , 26*, 301-325.

Ferris, P., Jagannathan, M., & Pritchard, A. (2003). Too busy to mind the business? Monitoring by directors with multiple board appointments. *Journal of Finance , 68*, 1087-1111.

Fich, E., & Shivdasani, A. (2006). Are busy boards effective monitors? *Journal of Finance , 61*, 689-724.

Finkelstein, S., & D'Aveni, R. (1994). CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal , 37*, 1079-1108.

Finkelstein, S., & Hambrick, D. (1996). *Strategic Leadership: Top Executives and Their Effects on Organizations.* Minneapolis/St. Paul: West Publishing.

Finkelstein, S., & Mooney, A. C. (2003). Not the usual suspects: How to use board process to make boards better. *Academy of Management Executive , 17* (2), 101-.

Fosberg, R. (1999). Leadership structure and CEO compensation. *American Business Review , 17*, 50-56.

Giove, S., Connolly, D. P., & Lilienfeld, D. E. (2011, October 11). *Shearman & Sterling's 9th Annual Corporate Governance Surveys Released.* Retrieved March 28, 2012, from Shearman & Sterling: http://www.shearman.com/shearman--sterlings-9th-annual-corporate-governance-surveys-released-10-11-2011/

Harris, D., & Helfat, C. E. (1998). CEO duality, succession, capabilities and agency theory: Commentary and research agenda. *Strategic Management Journal , 19*, 901-904.

Hermalin, B., & Weisbach, M. S. (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic Policy Review , 9*, 7-26.

Huang,L-Y, Lai, G.C., McNamara, M., & Wang, J. (2011). Corporate governance and efficiency: Evidence from U.S. property-liability insurance industry. *The Journal of Risk and Insurance, 78*, 519-550.

Intel. (2010). *DEF 14A Definitive Proxy Statement.* Retrieved March 25, 2012, from Intel Corporation: http://www.intc.com/secfiling.cfm?filingID=950123-10-31597

Iyengar, R., & Zampeli, E. M. (2009). Self-selection, endogeneity, and the realtionship between CEO duality and firm performance. *Strategic Management Journal , 30*, 1092-1112.

Jensen, M., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *The Journal of Financial Economics , 3* (4), 305-360.

Kaufman, A., & Englander, E. (2005). A team production model of corporate governance. *Academy of Management Executive , 19* (3), 9-22.

Kim, K., Al-Shammari, H. A., Kim, B., & Lee, S.-H. (2009). CEO duality leadership and corporate diversification behavior. *Journal of Business Research , 62*, 1173-1180.

Lam, T., & Lee, S. K. (2008). CEO duality and firm performance: Evidence from Hong Kong. *Corporate Governance , 8* (3), 299-316.

Larcker, D., Richardson, S. A., & Tuna, A. I. (2007). Corporate governance, accounting outcome and organization performance. *The Accounting Review , 82* (4), 963-1008.

Lorsch, J., & MacIver, E. (1989). *Pawns or Potentates.* Boston: Harvard Business School Press.

Mace, M. (1986). *Directors, Myth and Reality.* Boston: Harvard Business School Press.

Millstein, I. (1992). *The limits of corporate power: Existing constraints on the exercise of corporate discretion.* New York: Macmillan.

New York Stock Exchange. (2003). *Final NYSE Corporate Governance Rules.* Retrieved October 20, 2009, from NYSE: http://www.nyse.com/pdfs/finalcorpgovrules.pdf

Newman, H., & Mozes, H. (1999). Does the composition of the compensation committee influence CEO compensation practices? *Financial Management , 28* (3), 41-53.

Newmont Mining Corporation. (2005). *Form DEF 14A Definitive Proxy Statement.* Retrieved March 31, 2012, from Newmont Mining Corporation: http://newmont.q4cdn.com/b4abcf75-eb26-4eb0-ab34-9e1d475bc3cb.pdf?noexit=true

Petra, S., & Dorata, N. T. (2008). Corporate governance and CEO compensation. *Corporate Governance , 8*, 141-152.

Pfeffer, J. (1981). *Power in Organizations.* Boston, MA: Pitman.

Rechner, P., & Dalton, D. R. (1991). CEO duality and organizational performance: A longitudinal analysis. *Strategic Management Journal , 12*, 155-161.

Sapp, S. (2008). The impact of corporate governance on executive compensation. *European Financial Management , 14* (4), 710-746.

Schooley, D., Renner, C., & Allen, M. (2010). Shareholder proposals, board composition and leadership structure. *Journal of Managerial Issues , 22* (2), 152-165.

Shivdasani, A., & Yermack, D. (1999). CEO involvement in the selection of new board members: An empirical analysis. *Journal of Finance , 54*, 1829-1853.

Sun, J., & Cahan, S. (2009). The effect of compensation committee quality on the association between CEO cash compensation and accounting performa. *Corporate Governance: An International Review , 17* (2), 193-207.

Sun, J., Cahan, S. F., & Emanuel, D. (2009). Compensation committee governance quality, chief executive officer stock option grants and future firm performance. *Journal of Banking and Finance , 33*, 1507-1519.

Switzer, L., & Tang, M. (2009). The impact of corporate governance on the performance of U.S. small-cap firms. *International Journal of Business , 14*, 341-355.

United States Congress. (2002). *HR 3763.* Retrieved March 31, 2012, from Findlaw: http://fl1.findlaw.com/news.findlaw.com/cnn/docs/gwbush/sarbanesoxley072302.pdf

University of Cambridge Judge Business School. (n.d.). *The Cadbury Archive.* Retrieved March 25, 2012, from University of Cambridge: http://www.jbs.cam.ac.uk/cadbury/report/reactions.html

Useem, M. (1984). *The Inner Circle.* New York: Oxford University Press.

Vafeas, N. (2003). Further evidence on compensation committee composition as a determinant of CEO compensation. *Financial Management*, 53-70.

Valenti, A. (2008). The Sarbanes-Oxley Act of 2002: Has it brought about changes in the boards of large US corporations? *Journal of Business Ethics , 81*, 401-412.

Valenti, A., & Horner, S. V. (2010). Corporate directors' social capital: How centrality and density impact board monitoring. *Journal of Applied Business and Economics , 11* (4), 117-127.

van Ees, H., Gabrielsson, J., & Huse, M. (2005). For a behavioural theory on board and governance.

Weir, C., Laing, D., & McKnight, P.J. (2002). An empirical analysis of the impact of cop rotate governance mechanisms on the performance of UK firms. Working paper.

Cindy K. Harris is an Associate Professor of Business and Economics at Ursinus College and is a Certified Public Accountant. She received her MBA from The Wharton School and her BA in History from the University of Pennsylvania.

Carol C. Cirka is an Associate Professor and Chair of the Department of Business and Economics at Ursinus College and serves as adjunct faculty for the Fox School of Business at Temple University. She received her PhD in Human Resource Management with a concentration in Business Strategy from Temple University. She also holds an MBA from the University of Pittsburgh Katz Graduate School of Business and BA in Journalism and American Studies from the Pennsylvania State University.

Eric Farris graduated with honors from Ursinus College in 2010 with a major in Business and Economics. He is a Certified Public Accountant currently working as an audit associate with KPMG in Philadelphia, PA.

APPENDIX

DIAGRAM 1

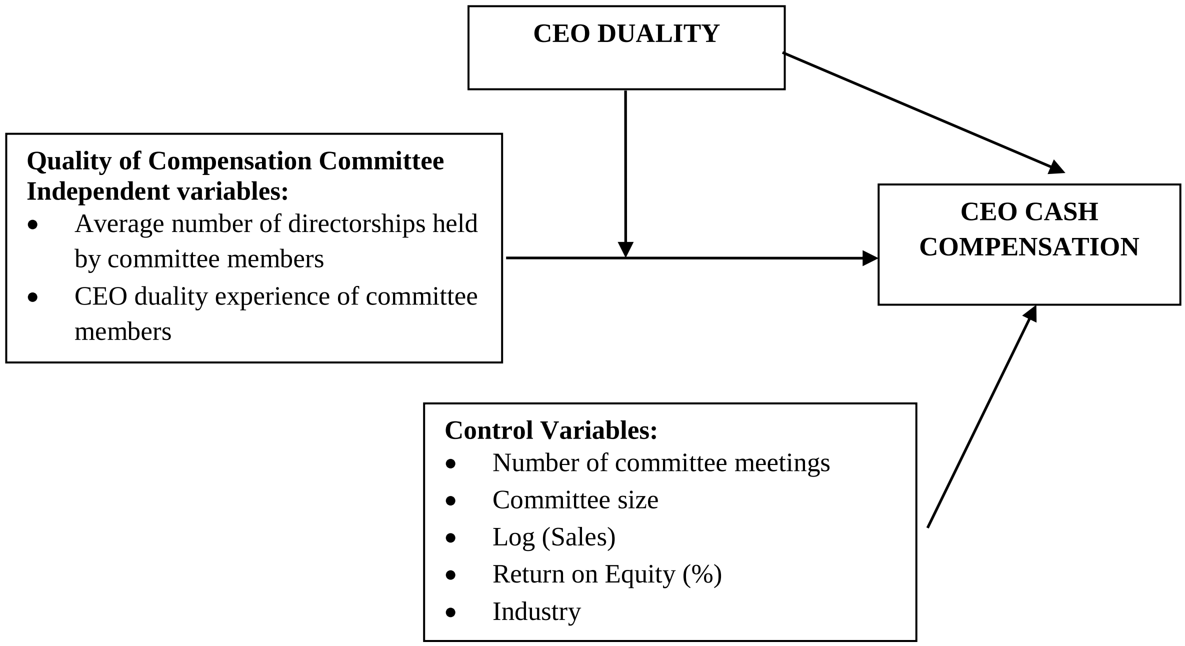

TABLE 1
Sample Selection

Reason for Exclusion	Total
Financial Companies	40
Public Utilities Companies	23
Non-Calendar Fiscal Year End	65
Change in CEO	11
Change in CEO Duality	2
Miscellaneous Exclusions	24
Multiple Exclusions	19
Total	**184**

TABLE 2
Descriptive Statistics (N=100)

Variable	Mean	Standard Deviation
***Dependent variable*:**		
CashSalary2008 (log)	13.88	0.49
Independent variables:		
CEODuality	0.70	0.46
AverageDirectorships	1.62	0.84
CompCommitteeMemberDuality	0.42	0.28
Control Variables:		
Meetings	6.46	2.49
CommitteeSize	4.30	1.01
ROE (percentage)	18.27	26.27
Sales (log)	23.08	1.06

TABLE 3
Sample Breakdown by Industry

Industry	Companies
Mining	6
Manufacturing	59
Communication	11
Retail	14
Service	10
Total	100

TABLE 4

Pearson Correlations

	1	2	3	4	5	6	7	8
1 CashSalary2008 (log)	1							
2 CEODuality	.14 (.16)	1						
3 AverageDirectorships	.29** (.00)	-.14 (.16)	1					
4 CompCommittee-MemberDuality	.31** (.00)	.26** (.01)	.18 (.07)	1				
5 CommitteeSize	.14 (.16)	.11 (.28)	-.12 (.23)	.11 (.26)	1			
6 Meetings	.18 (.07)	-.07 (.48)	.17 (.09)	.06 (.58)	-.04 (.70)	1		
7 ROE (%)	-.07 (.50)	.24* (.02)	.03 (.77)	.14 (.18)	.05 (.60)	.05 (.59)	1	
8 Sales (log)	.25* (.01)	.17 (.09)	.24* (.02)	.27** (.01)	.16 (.11)	.08 (.41)	.09 (.39)	1

(Significance 2-tailed at 1% level)**
(Significance 2-tailed at 5% level)*

TABLE 5

Model 1 Regression Results **R^2=0.363, Adjusted R^2=0.284**

	Coefficient	*Standard Error*	*T-Statistic*	*P-value*	*Significance*
Intercept	11.255	0.994	11.319	0.000	***
Independent Variables:					
CEODuality	0.138	0.101	1.365	0.176	
AverageDirectorships	0.149	0.055	2.711	0.008	***
CompCommitteeMemberDuality	0.299	0.170	1.760	0.082	*
Control Variables:					
Meetings	0.039	0.018	2.196	0.031	**
CommitteeSize	0.063	0.043	1.481	0.142	
ROE (%)	-0.004	0.002	-2.220	0.029	**
Sales(log)	0.075	0.045	1.653	0.102	*
Mining	0.331	0.222	1.495	0.139	
Manufacturing	0.044	0.153	0.870	0.775	
Communication	-0.483	0.184	-2.623	0.010	***
Retail	-0.043	0.180	-0.390	0.812	

TABLE 6

Model 2 Regression Results **R^2=0.410, Adjusted R^2=0.321**

	Coefficient	*Standard Error*	*T-Statistic*	*P-value*	*Significance*
Intercept	11.058	1.000	11.059	0.000	***
Independent Variables:					
CEODuality	0.328	0.222	1.476	0.144	
AverageDirectorships	0.278	0.073	3.800	0.000	***
CompCommitteeMemberDuality	-0.255	0.359	-0.710	0.479	
Interaction Terms:					
CEODuality*AverageDirectorships	-0.252	0.108	-2.326	0.022	**
CEODuality*CompCommitteeMemberDuality	0.690	0.401	1.721	0.089	*
Control Variables:					
Meetings	0.034	0.017	1.949	0.055	**
CommitteeSize	0.064	0.043	1.475	0.144	
ROE (%)	-0.004	0.002	-2.624	0.010	***
Sales(log)	0.083	0.045	1.857	0.067	*
Mining	0.293	0.217	1.346	0.182	
Manufacturing	0.020	0.149	0.134	0.894	
Communication	-0.559	0.182	-3.077	0.003	***
Retail	-0.066	0.176	-0.376	0.708	

***significant at the 1% level, **significant at the 5% level, *significant at the 10% level