

**The Impact of Form of Compensation and Likelihood of PCAOB
Inspection on Audit Committee Member Resolution of
Management/Auditor Disputes**

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The Impact of Form of Compensation and Likelihood of PCAOB Inspection on Audit Committee Member Resolution of Management/Auditor Disputes

ABSTRACT: This study reports the results of an experiment that investigates whether simultaneously imposed pressures related to form of audit committee member compensation and risk of Public Company Accounting Oversight Board (PCAOB) inspection cause audit committee members to make qualitatively different decisions when solving financial reporting disputes between management and the external auditors. Specifically, it was hypothesized that individuals receiving primarily option compensation would show greater support for management, and those individuals with a high likelihood of inspection by the PCAOB would show greater support for the auditors. Ninety-two Executive MBA students participated in this between-subjects experiment. Consistent with these predictions, participants showed the greatest support for management when compensated primarily with options and the greatest support for the position of the auditors when faced with a high likelihood of PCAOB inspection. In addition, a significant interaction indicates that the moderating effect of PCAOB inspection only holds when participants are compensated with options.

Keywords: audit committees, PCAOB inspection, stock option compensation, proposed audit adjustments, corporate governance

Data Availability: Data available upon request.

INTRODUCTION

The increased demands on audit committee members as a result of both intensified shareholder scrutiny and additional regulatory burdens have made the search for factors that may impact the effectiveness of the audit committee in fulfilling its governance responsibilities an increasing priority. Audit committees have been under increasing pressure to strengthen their oversight process. Regulations related to improving the overall effectiveness of the audit committee process have been passed in recent years by the New York Stock Exchange (NYSE), the National Association of Securities Dealers (NASD), the American Institute of Certified Public Accountants (AICPA) (Statement of Accounting Standards No. 90) and most recently the U.S. Congress (Sarbanes-Oxley Act of 2002). Clearly, ways in which to improve the audit committee governance process are seen as a high priority by many participants in the regulatory process.

The purpose of this paper is to experimentally examine some of the fundamental conflicting incentives/pressures faced by audit committee members when attempting to effectively fulfill their governance responsibilities. Specifically, this paper examines whether simultaneously imposed pressures related to form of audit committee member compensation (stock options versus cash) and risk of Public Company Accounting Oversight Board (PCAOB) inspection (likely versus unlikely) cause audit committee members to make qualitatively different decisions when solving financial reporting disputes between management and the external auditors. Understanding which of these conflicting pressures “wins” when the audit committee is faced with settling financial reporting disagreements between management and the external auditors is critical

because of the direct impact that the resolution of these financial issues has on the financial statements.

An agency theory framework can be used to examine some of the incentive alignment issues that may exist as a result of compensation contracts. In an agency theory framework, the principal is the owner of the firm and the agent is the manager hired by the owner to manage the firm in her best interests. The owner is presumed to write compensation contracts for the managers that maximize the value of the firm to the owners. In a real world setting, the owners are represented by the Board of Directors and the manager is represented by the CEO and other managers of the firm. The theoretical case for the incentives of the manager to engage in suboptimal and/or opportunistic behavior is well documented (Jensen and Meckling 1976; Watts and Zimmerman 1978, 1979; Fama 1980; Fama and Jensen 1983). A large body of empirical evidence also exists that supports these theoretical arguments (Healy 1985; Press and Weintrop 1990; Jones 1991; Burgstahler and Dichev 1997; Han and Wang 1998; Barton 2001; Dichev and Skinner 2002). This is particularly true when the manager's compensation contract is tied to stock prices through stock options (Yermack 1997; Aboody and Krasznik 2000; Chauvin and Shenoy 2001; Baker, Collins and Reitenga 2003; Cheng and Warfield 2005; Burns and Kedia 2006).

As evidenced by the large body of laws and regulations governing the composition of Boards of Directors, the conflict that arises when managers hold membership on the Board of Directors is well recognized. This conflict would be particularly acute if internal members were able to dominate the audit committee and thus strengthen management's influence in cases where there is a disagreement between the

external auditor and management. The independence requirements imposed on audit committee members by the Sarbanes-Oxley Act (SOX) are designed to help alleviate this problem. However, the problem still exists if directors receive compensation in the form of stock options. In effect, using options as director compensation has potentially broadened the “agency relationship umbrella” to include not only management but directors as well. The implications of misaligned loyalties on the part of audit committee members can be substantial, given that they are charged with oversight of the financial reporting process.

Following a growing trend, International Business Machines Corporation (IBM) announced in December of 2006 that they will no longer grant outside directors options (Lublin and Bulkeley 2006). Peter Gleason, COO of the National Association of Corporate Directors (NACD) expressed the view that eliminating options as a form of director compensation reduces controversy because any potential for manipulation just goes away. Stock options are worthless unless a stock price rises, thereby creating an incentive to manage earnings (and therefore stock price) for the short term. However, in an annual report on director pay (Koors 2006) it was noted that more than 50 percent of all companies examined still use stock options to compensate their directors.

Largely in response to concerns over the amount and form of executive and director compensation, the Securities and Exchange Commission (SEC) recently approved regulations that would require expanded disclosures related to executive and director compensation, including stock-option grants and corporate stock option programs (SEC 2006). In addition, the NYSE has recently expressed its concern over the potential influence that option compensation may have on directors’ judgments.

Competing pressures to mitigate the potential for opportunistic behavior on the part of audit committee members due to receipt of options do exist. Potential sanctions from perceived ineffective director performance could be litigation costs, and/or damage to reputation and loss of standing in the business community. This is particularly true for highly visible directors, such as audit committee members, who have direct oversight responsibility of the financial reporting process. A vehicle by which some of these sanctions may be realized is the Public Company Accounting Oversight Board (PCAOB). The PCAOB is charged with conducting public company inspections of registered audit firms. Part of the PCAOB's inspection process includes interviewing substantially all audit committee chairpersons of the companies they select for inspection, and also encompasses a review of the communication between the public accounting firms and the audit committee. Depending upon the severity of the PCAOB's findings, violations may be reported to the SEC. The SEC may require a company to restate its financial statements. In addition, all significant findings by the PCAOB are publicly disclosed. The reputation impact, as well as the potential litigation risk for audit committee members who are associated with companies whose financial statements are restated, would seem to act as a significant deterrent to potential opportunistic financial reporting decisions by audit committee members.

Consistent with the predictions above, the results of the experiment suggest that form of compensation does influence the side taken by participants when resolving financial reporting disputes between management and the external auditors. Specifically, when subjects received primarily stock options as their form of compensation, they were more likely to agree with management's position. In addition, when faced with a high

likelihood of PCAOB inspection, participants were more likely to agree with the position taken by the external auditors. A significant interaction indicates that the effect of PCAOB inspection only holds when participants are compensated with options.

The ultimate goal of both regulators and shareholders is the preparation of high-quality, transparent financial statements. The audit committee has a responsibility to ensure to the best of their ability that this goal is achieved. Obtaining the clearest understanding possible of the factors that contribute to an audit committee successfully achieving this goal is of paramount interest to all stakeholders in the financial reporting process.

BACKGROUND AND HYPOTHESES

The Audit Committee's Role in the Financial Reporting Process

SAS No. 90 requires an auditor of Securities and Exchange Commission (SEC) clients to discuss with audit committees the auditor's judgments about the quality, not just the acceptability, of the company's accounting principles and underlying estimates in its financial statements. Some of the recent financial failures have been the result of the aggressive use (misuse) of acceptable accounting policies. Therefore, the responsibility of the audit committee to make an assessment of the quality as well as the acceptability of the company's accounting policies and estimates has the potential to have large implications on the actual financial statements issued by management.

The audit committee is required to be notified when there are disputes between management and the external auditors (SAS No. 114, *The Auditor's Communication with those Charged with Governance*, AICPA, 2007; SAS No. 61, *Communication with Audit Committees*, AICPA, 1988b; SAS No. 89, *Audit Adjustments*, AICPA, 1999a). SOX

takes the audit committee's responsibility a step further by specifically charging the audit committee with the resolution of financial reporting disagreements.

Numerous researchers have examined the role audit committees play in the financial reporting process. Typically, these studies have examined the factors that impact the willingness of audit committees to support the auditor in disputes with management regarding the booking of audit adjustments. Knapp (1987) was the first to experimentally examine the role that audit committees play in the resolution of auditor/management disputes. His findings suggest that audit committee members are more likely to support the auditor when the issue in dispute is supported by objective, rather than subjective technical standards and when the company is in relatively poor financial condition. Knapp's (1987) findings also suggest that audit committee members who were currently also employed as corporate managers were more supportive of the auditors than were subjects who were retired business executives or individuals with a non-business background.

DeZoort and Salterio (2001) expand upon Knapp (1987), by examining in more detail the manner in which individual audit committee member characteristics impact their decisions in auditor/management disputes. Specifically, the authors examine the impact of audit committee member independence and financial knowledge. The authors found that more independent board member experience and higher audit-reporting knowledge were associated with greater support for the auditor in the auditor/management dispute. Contrary to Knapp (1987), their results also suggest that concurrent board/management membership is associated with greater support for

management in the auditor/management dispute. Financial-reporting knowledge was not found to impact audit committee member judgment.

DeZoort et al. (2003a) provide additional insight into the factors that may impact audit committee member willingness to support auditors in auditor/management disputes. This study examined the effect of materiality justification and accounting precision on audit committee members' decisions. The results in this experiment suggest that audit committee members will show stronger support for the auditor when the auditors provide both quantitative and consequences-oriented justification (impact on earnings trend). They also found that CPAs and audit committee members who were more experienced (as measured by the number of audit committees on which the respondent currently serves) tended to side with the auditors and propose that the adjustment be recorded.

DeZoort et al. (2003b) perform an additional experiment in which they examine the impact of financial-report timing, EPS proximity to analyst forecast and external auditor argument consistency on audit committee member support for a proposed audit adjustment. The authors found that audit committee members were more likely to support the recording of audit adjustments when the audit is at year-end, unadjusted EPS is above rather than below forecast, and when the auditor consistently argues for adjustment. Surprisingly and in contrast to DeZoort et al. (2003a), the authors found that CPAs were less likely to argue for adjustment. Written explanations suggest that the CPAs either viewed the proposed adjustment as being immaterial (3% of pre-tax income) or they felt the amount was too subjective to be recorded.

The results of the existing literature seem to suggest that the disposition of management/external auditor disputes varies greatly depending upon the type of dispute

in question, the timing of the disagreement, and the individual characteristics of the audit committee members attempting to settle the dispute. These results highlight the need for additional research in this area in order to more fully explore the complexities inherent in the corporate governance process.

Impact of Stock Option Compensation on Financial Reporting

Boards of directors were created as a way of protecting the interests of shareholders due to the conflict that arises from the separation of corporate management and ownership. Agency theory suggests that this may be necessary because management may not always act in the best interests of the owners (Fama 1980, Fama and Jensen 1983). Including stock options as part of overall compensation packages was seen as a way to more closely align the interests of management and shareholders by creating an incentive for managers to make operating and investing decisions that maximize shareholder wealth (Jensen and Meckling 1976). While there is evidence that option based pay does in some instances reduce the level of agency issues between management and shareholders (See Bryan 2000 for a review of literature), there is a growing body of research that suggests that option-based pay may also create incentives for management to act in an opportunistic manner.

Yermack's (1997) findings suggest that the timing of CEO stock option awards coincides with favorable movements in company stock prices, suggesting that CEOs receive stock option awards shortly before favorable corporate news. Aboody and Krasznik (2000), found evidence that suggests that CEOs make opportunistic voluntary disclosure decisions that maximize their stock option compensation. The results of a paper by Chauvin and Shenoy (2001) show an abnormal decrease in stock prices during a

10-day period immediately preceding the grant date of stock options. These studies all provide evidence that management opportunistically manage either award dates or disclosure dates to maximize option value.

Baker, Collins and Reitenga (2003) investigate the possibility that as opposed to managing either option award dates or disclosure dates, companies may be managing earnings to maximize option value. Specifically, they examine whether the use of stock options, relative to other forms of pay, is associated with the opportunistic use of discretionary accruals in reported earnings. Their findings suggest that relatively high option compensation is associated with income-decreasing discretionary accrual choices in the periods leading up to award dates, which would result in lowering the exercise price of the options. In addition, Cheng and Warfield (2005) examined the relationship between equity incentives and earnings management and found that managers with high equity incentives are more likely to engage in earnings management to increase the value of their shares. Burns and Kedia (2006) examined some characteristics of firms that announced restatements to their financial statements. They found that the sensitivity of a CEO's option portfolio to stock price was significantly and positively associated with the propensity to misreport, providing support for the authors' assertion that the incentives from options encourage aggressive accounting practices that result in restatement.

In an annual report on director pay (Koors 2006) conducted by a collaboration between Pearl Meyer & Partners, the NACD and The Center for Board Leadership¹, it was noted that although the use of full-value shares over options is gaining favor because of both governance concerns and the new requirements related to mandatory option

¹ This study examined director pay for the Top 200 U.S. Companies, along with 1,187 randomly selected companies representing 26 industries and five revenue tiers using 2004 and 2005 proxy statements.

expensing, more than 50 percent of all companies examined still use stock options to compensate their directors and the percentage of total remuneration from stock options ranged from 23 to 29 percent depending upon the size of the company.

Based upon the extensive literature that supports the finding that stock options provide incentives for management to make opportunistic financial decisions, and given the expanded role that audit committee members play in the financial reporting process, as well as the data that shows that a majority of directors are compensated using stock options and that it is a significant portion of their total remuneration, I propose the following hypothesis in alternative form:

H1: Audit committee members who receive a significant portion of their compensation in the form of stock options will be more likely to support management in disputes with the auditor than will members who do not receive such compensation.

Public Company Accounting Oversight Board

The passage of the Sarbanes-Oxley Act (2002) also resulted in the establishment of the Public Company Accounting Oversight Board (PCAOB). The PCAOB is charged with conducting public company inspections of registered audit firms. This task was previously carried out through the use of peer reviews, in which firms who were members of the SEC Practice Section would review the audits of one another. An audit firm is subject to annual reviews if they audit more than 100 SEC registrants, firms with fewer than 100 SEC registrants are subject to reviews by the PCAOB every three years.

According to the PCAOB, Board inspections are designed to identify and address weaknesses and deficiencies related to how a firm conducts audits. Audit engagements are selected based upon the Board's criteria and the audit firm is not allowed an opportunity to limit or influence the selection process. After an engagement is selected

the Board chooses certain high-risk areas of the audit engagement to review. Part of the review process includes interviewing substantially all audit committee chairpersons of the companies they select for inspection and also encompasses a review of the communications between the public accounting firms and the audit committees. If it should come to the Board's attention that an issuer's financial statements appear not to present fairly, in a material respect, the financial position, results of operations, or cash flows of the issuer in conformity with GAAP, the Board reports the information to the SEC, which has jurisdiction to determine the proper accounting treatment in the issuer's financial statements. This may result in the company in question having to restate their financial statements. In addition, the results of the PCAOB's audits are publicly disclosed.

Results of the 2004 full inspections conducted by the PCAOB reveal numerous instances in which the inspection staff concluded some audit deficiencies were so significant that they did not believe that the audit firm had obtained sufficient competent audit evidence to support the opinion rendered (PCAOB 2005d). The PCAOB has demonstrated a willingness to take the inspection process very seriously and has shown that it is not going to "rubber stamp" the engagements that it selects for review.

The Auditor's Communication With Those Charged With Governance

The Auditing Standards Board (ASB) issued SAS No. 114², *The Auditor's Communication with those Charged with Governance* which supersedes SAS No. 61, *Communication with Audit Committees*. This standard, among other things, details the

² There is currently an exposure draft that would supersede SAS No. 114 if approved. The major changes in this redraft are related to the potential requirement that auditors communicate with those charged with governance, issues related to risk and materiality as part of their discussion of the planned scope and timing of the audit.

specific form in which significant audit findings should be communicated to “those charged with governance”. The standard strongly suggests that the auditor should communicate in **writing** the auditor’s views about the qualitative aspects of the entity’s accounting practices, including accounting estimates. The standard also states that the auditor should explain to those charged with governance why the auditor considers a significant accounting practice not to be appropriate and when considered necessary, request that changes be made. If requested changes are not made, the auditor should inform those charged with governance that the auditor will consider the effect of this on the financial statements of the current and future years, and on the auditor’s report.

Given that SAS No. 114 strongly encourages auditors to communicate to the audit committee in writing (unless oral communication is deemed to be adequate) qualitative aspects related to the audit and any disagreements with management, if the auditors have taken a stand against the appropriateness of an accounting estimate developed by management, the potential review of these communications by the PCAOB in the event of a review of the engagement would increase the pressure on audit committee members to make conservative judgments when determining whether an accounting estimate is reasonable. This would especially be the case given the latitude that the PCAOB has in initiating a review by the SEC which could result in the company having to restate their financial statements.

Consequences of Firm Performance on Outside Directors

Zajac (1988) asserts that individuals join boards for financial remuneration, prestige and contacts that may prove useful in securing subsequent employment opportunities. Fama and Jensen (1983) and Lorsch and MacIver (1989) mirror some of

these findings by arguing that the primary benefits to outside directors from board membership are prestige, reputation, learning opportunities and networking.

Presumably, directors who fulfill their roles effectively will be rewarded by not only maintaining the current board positions that they hold, but also by securing additional board appointments. Perceived ineffective performance, whether or not it is the result of actual audit committee performance is costly to directors. Specifically, research has shown that directors, especially audit committee members, are penalized for both financial restatements and financial failures of companies on whose boards they serve (Gilson 1990; Srinivasan 2005). The authors' findings suggest that directors are not only significantly more likely to lose their seat on the board experiencing the financial difficulties, but that their other board appointments may be in jeopardy as well.³

The PCAOB not only has the authority, but has demonstrated the willingness to report findings that may result in financial restatements on the part of a company under inspection. Prior research has shown that these restatements significantly impact the retention of board seats by audit committee members, not only on the company actually making the restatement, but for other companies on whose boards these directors serve. Therefore, I propose the following hypothesis in alternative form:

H2: Audit committee members facing a high likelihood that the company on whose committee they serve will be selected for PCAOB inspection will be more likely to support the auditor in disputes with management than will members facing a low likelihood of selection.

Form of Compensation versus Risk of PCAOB Inspection

³ The study showed that these individuals were no longer directors on 25 percent of their other board appointments.

Ultimately, audit committee members will have to assess the relative cost/benefits of their governance decisions. Shamir (1990) examined various forms of collectivistic work motivation. One form of motivation is calculation. This results when rewards or sanctions are anticipated to follow from group performance. Potential rewards for effective performance as an audit committee member would be future board appointments and respect within the business community. Potential costs from perceived ineffective audit committee performance could be litigation costs, and/or damage to reputation and loss of standing in the business community.

Prior research has shown that the use of stock options as compensation can create incentives for individuals to make opportunistic financial decisions. Given that a majority of directors are still receiving stock options as a form of compensation, as noted above, there have to be forces in place to counteract the incentives created by the use of these options. A relatively new potential force is a PCAOB inspection. If the PCAOB discovers material departures from Generally Accepted Accounting Principles (GAAP) during the course of its inspection, the PCAOB reports the information to the SEC, which has the jurisdiction to determine the proper accounting treatment in the issuer's financial statements, which may result in the company in question having to restate its financial statements. Furthermore, the results of the PCAOB's audits are publicly disclosed.

Financial remuneration has been identified as one of the primary reasons that individuals accept board positions (Zajac 1988), and prior research suggests that the type of compensation that board members receive can result in opportunistic decisions by the director in question, thereby increasing the likelihood that these board members will make financial decisions that align themselves with management. However, given the

significant sanctions in terms of both current and future board appointments that may be imposed on audit committee members as a result of an inspection by the PCAOB that ultimately results in an accounting restatement, a strong argument can be made that the risk of PCAOB inspection will moderate the effect of form of compensation on the side an audit committee member takes in management/auditor disputes. Therefore, when the risk of PCAOB inspection is high, form of compensation will have less impact on the audit committee member's willingness to side with management. However, when the risk of PCAOB inspection is low, form of compensation is expected to have a greater influence on the side an audit committee member will take in a management/auditor dispute.

Specifically, I expect the greatest support for management by audit committee members to occur when these members' primary form of compensation is stock options and the risk of audit by the PCAOB is low. Therefore, I offer the following hypothesis in alternative form:

H3: Form of compensation and likelihood of PCAOB inspection will interact to reduce the support shown for management in a dispute, with likelihood of PCAOB inspection moderating the effect of form of compensation on the side an audit committee member will take in management/auditor disputes.

Figure 1 presents the pattern of predicted effects of the form of compensation and risk of PCAOB inspection on the side taken in a dispute between the external auditors and management.

(Insert Figure 1 here)

METHODOLOGY

Participants

Participants consisted of Executive MBA students from two U.S. large universities. McDaniel et al. (2002) used recent Executive M.B.A. graduates as proxies for audit committee members. The use of Executive MBA students as proxies for audit committee members is appropriate because these individuals provide an adequate level of financial literacy as well as diversity in terms of their backgrounds. These attributes provide a good match to the backgrounds found in actual audit committee members.

Experimental Task

The participants evaluated an audit case for a hypothetical company (Technology Advances Inc.) in which they assumed the role of audit committee members. The case involved a dispute between management and the external auditors related to the adequacy of the warranty reserve. Subjects were asked to indicate their support for either management (i.e. definitely allow the use of the estimate) or the auditors (i.e. definitely do not allow the use of the estimate). In addition, subjects were asked to explain the rationale for their decision.

Case materials also included two manipulation checks related to form of compensation and risk of PCAOB audit in order to ensure that participants understood the treatment conditions. In addition, demographic information was collected.

The hypotheses were tested using a between-subjects design with form of compensation (a substantial retainer and per meeting fee versus a minimal retainer, per meeting fee and stock options) and risk of PCAOB inspection (unlikely versus likely) as the experimental variables.

Accounting Issue

The accounting issue involved the adequacy of the warranty reserve as proposed by management. The warranty reserve in question was related to a new product line acquired by the company as the result of a recent acquisition. The subjectivity involved in determining the adequacy of the warranty reserve is appropriate for this study because it allows for greater influence of other contextual factors, which are the focus of this study. In addition, subjective accounting issues are representative of the types of issues that would be brought before actual audit committees for resolution (DeZoort et al., 2003b).

Form of Compensation

Compensation was manipulated as being either completely cash based or a minimal amount of cash and significant potential stock option compensation. Specifically, the **cash compensation condition** stated “your compensation as an audit committee member consists of an annual fixed retainer of \$200,000, plus meeting fees of approximately \$40,000, resulting in total cash compensation of \$240,000” and the primarily **option compensation condition** indicated that total cash compensation was \$40,000 and “in addition, you currently hold 20,000 stock options that will vest within the next week..... If the current market price of the shares remains the same and you choose to exercise your options and sell the shares, total compensation will be \$40,000 in cash compensation and \$200,000 in proceeds from the options, resulting in total compensation of \$240,000”.

Risk of PCAOB Inspection

The risk of inspection by the PCAOB was manipulated as being either unlikely or likely. In the likely condition, the instrument states that although the risk of this

company is average for the audit firm in question, the new acquisition by the company makes it highly likely to be selected for inspection. The low condition also states that the risk of the company is average for the audit firm in question; however it states that it is highly unlikely that it will be selected for inspection.

Dependent Variable

The dependent variable is the subject's willingness to support either management or the auditor in the accounting dispute. This was measured on a continuous Likert scale ranging from 1 = support management's position (i.e. definitely allow the use of the estimate) to 11 = support the auditor's position (i.e. definitely do not allow the use of the estimate). Participants were also asked to provide justification for their decisions.

DATA AND RESULTS

Results were analyzed using a 2 X 2 (form of compensation by likelihood of PCAOB inspection) analysis of variance (ANOVA) and planned comparisons. Table 2 presents treatments means and the results of testing hypothesis H1 through H3.

Manipulation Checks

The results of the manipulation checks were as follows: risk of PCAOB inspection (8 percent failure rate), and form of compensation (8 percent failure rate). All participants who failed at least one manipulation check were eliminated, leaving 92 participants available for hypothesis testing. I ran the ANOVA model with the full sample included and the results were similar to those reported below. Significance for all hypotheses was still achieved at the $p < .05$ level.

Demographics

Table 1 presents descriptive statistics related to participants. The age of participants ranged from 25 to 62, with a mean age of 35. In addition, 73 percent of the respondents were male. Only 2 percent had prior experience on an audit committee. Similarly, only 2 percent had been involved in a PCAOB audit. 35 percent of the participants had received stock option compensation in the past. For those members receiving stock option compensation, it comprised, on average, 8.8 percent % of their total salary.

(Insert Table 1 here)

Form of Compensation

Hypothesis 1 predicts audit committee members who receive a significant portion of their compensation in the form of stock options will be more likely to side with management than will members who do not receive this form of compensation. Table 2, Panel A, provides marginal means for the cash and options form of compensation of 7.44 and 6.34, respectively. Panel B shows that the form of compensation significantly affects the side audit committee members take in auditor/management disputes ($F= 6.597, p<.01$, one-tailed). Specifically, audit committee members who receive a significant form of their compensation in the form of stock options were more likely to side with management in disputes with the auditor than were members who do not receive such compensation. This result is consistent with and provides support for the prediction made in H1.

(Insert Table 2 here)

Risk of PCAOB Inspection

Hypothesis 2 predicts that audit committee members facing a high likelihood that the company on whose committee they serve will be selected for public company inspection will be more likely to support the auditor in disputes with management than will members facing a low likelihood of selection. Table 2, Panel A provides marginal means for low and high likelihood of PCAOB inspection of 6.13 and 7.60, respectively. Panel B shows that a high likelihood of public inspection significantly affects the side audit committee members take in auditor-management disputes ($F = 10.490, p < .01$, one-tailed). Specifically, audit committee members who face a high likelihood of inspection by the PCAOB will be more likely to side with the auditor in disputes with management than will members facing a low likelihood of inspection by the PCAOB, therefore the predictions made in H2 are supported.

The Moderating Effect of Risk of PCAOB Inspection on Form of Compensation

Hypothesis 3 predicted that the likelihood of PCAOB inspection would moderate the effect of form of compensation such that subjects would have a greater tendency to support the external auditor when the likelihood of PCAOB inspection was high (without regard to the form of compensation) and the strongest support for management when the likelihood of PCAOB inspection was low and subjects were compensated primarily in the form of options. A planned comparison (see Figure 1) was conducted for the dependent variable measure to test the moderation prediction in H3. The planned comparison tests whether:

$[\text{Cell 1 mean} - \text{Cell 2 mean}] > [\text{Cell 3 mean} - \text{Cell 4 mean}]$, where:

Cell 1 = Cash and low likelihood of PCAOB audit

Cell 2 = Significant stock option compensation and low likelihood of PCAOB audit

Cell 3 = Cash and high likelihood of PCAOB audit

Cell 4 = Significant stock option compensation and high likelihood of PCAOB
audit

As depicted in Figure 1, it was predicted that there would be a significant difference between the Cell 1 and Cell 2 mean absolute difference (2.04) and the Cell 3 and Cell 4 mean absolute difference (.33). As shown in Panel C of Table 2 (and depicted in Figure 2) the absolute difference between Cells 1 and 2 and Cells 3 and 4 was significantly different and in the direction predicted ($t = 1.853, p = .034$). Specifically, the absolute difference between Cells 1 and 2 was significantly greater than the difference between Cells 3 and 4 therefore the moderation predicted in H3 is supported.

(Insert Figure 2 here)

Supplemental Analysis – Simple Effects

As discussed above, form of compensation and risk of PCAOB inspection were found to interact to affect the side an audit committee member would take in the management/external auditor dispute. The initial test of the interaction does not provide an indication as to which cell means are different from the others. Additional tests were conducted, using planned comparisons, to explore the nature of the interactions. Figure 2 illustrates the simple effects of the form of compensation and likelihood of PCAOB inspection on the side taken in a management/external auditor dispute in a hypothetical audit setting.

The planned comparisons (not tabulated) revealed that for subjects receiving primarily options as their form of compensation, a high likelihood of PCAOB inspection led to greater support for the auditors than for those with a low likelihood of PCAOB

inspection ($F = 13.202, p < .01$). For subjects receiving cash as their form of compensation, likelihood of PCAOB inspection had no effect ($F = .948, p = .333$).

Supplemental Analysis – Comparison of Cell Means versus Mid-point

In order to assess the strength of participants' support for either management or the auditor in the hypothetical audit case one sample t-tests were conducted to compare cell means for each of the four possible setting combinations versus the dependent variable measurement scale (11-point Likert scale, with 1 indicating support for management and 11 indicating support for the auditor) mid-point of 6. Table 2, panel D, shows that all four possible combinations were significantly different than the mid-point of 6.

Participants in the Cash/Unlikely PCAOB inspection setting had a mean of 7.13, exceeding the mid-point of 6 by 1.13 ($t = 2.26, p = .017$). The mean in the Cash/Likely PCAOB inspection setting was 7.77, exceeding the mid-point by 1.77 ($t = 3.93, p = .000$). In addition, the mean in the Options/Likely PCAOB setting of 7.44, exceeding the mean by 1.44 ($t = 3.22, p = .002$). The results of the *t*-tests for these three conditions indicate support for the auditor in the hypothetical dispute.

The mean in the Options/Unlikely PCAOB inspection was 5.09, which was lower than the mid-point by .91 ($t = -2.06, p = .026$) thereby indicating support for management in the hypothetical dispute.

Supplemental Analysis – Analysis of Demographic Covariates (ANCOVA)

ANCOVA's were performed (not tabulated) using selected demographic information as individual covariates. The inclusion of age, gender, and prior and/or current stock option compensation were analyzed as covariates. None of these variables were found to significantly impact the dependent variable while controlling for the two

independent variables. Because of the small number of subjects who reported having either a CPA designation, prior audit committee experience or prior participation in a PCAOB inspection, ANCOVA's could not effectively be performed on these variables.

Rationale for Dispute Decision

For participants supporting management ($DISPUTE < 6$), the most common explanation was that management would have more expertise in this area and that their advice should be followed. The second most frequent response was concern over the impact that making the adjustment would have on the company's financial performance. This response underscores the fact that participants did strongly consider the financial consequences of the potential adjustment.

For participants supporting the auditors ($DISPUTE > 6$) the most frequent explanation given was the objectivity and independence of the auditors. Given that the role of the external auditor is one of providing objective, independent oversight this response was expected.

DISCUSSION AND IMPLICATIONS

This study experimentally investigates the impact of form of compensation and likelihood of PCAOB inspection on the side taken by audit committee members in a dispute between management and the external auditors. Prior literature (DeZoort et. al. 2003), suggests that audit committee members have a tendency to support the auditor when there are disputes related to subjective accounting estimates. This study examines additional variables that may impact the decision process. Specifically, two questions are investigated. First, does the use of option compensation by management provide a strong enough incentive in these dispute settings to change the position taken by audit

committee members from the auditors to management particularly when negative financial consequences result from siding with the auditors? Second, will the potential consequences associated with an inspection by the PCAOB be enough to mitigate the incentives created by option compensation? The study's results suggest that the answer to both of these questions is yes.

As was predicted, the experimental results suggest that audit committee members are more likely to support management when they are compensated with stock options and when the likelihood of PCAOB inspection is low. The predicted interaction between likelihood of PCAOB inspection and form of compensation was also supported. An analysis of the simple effects showed that the moderating effect of likelihood of PCAOB inspection only holds when participants are compensated with options. Participants demonstrated a significant preference for the auditor's position, as compared to the mid-point of the measurement scale in all but the Options/Low Likelihood of PCAOB inspection condition; with these individuals demonstrating a significant preference for the position of management.

The main effects of form of compensation and risk of PCAOB inspection highlight the potential incentives/pressures that can both directly and indirectly impact the decisions an audit committee member makes related to accounting disputes that ultimately determine the numbers presented in the financial statements. Gaining a better understanding of how both form of compensation and PCAOB inspection risk individually and jointly impact audit committee members' decisions allows stakeholders to gain valuable insights into ways in which loyalties that have been potentially misaligned due to option compensation

can be realigned by regulatory requirements aimed at improving the corporate governance process.

Although there has been much discussion among the investing and regulatory community⁴ regarding both the need for increased disclosure of the type of director compensation as well as the more global issue as to whether the use of options as director compensation should be eliminated altogether, currently options are still used by a majority of companies to compensate their directors (Koors 2006). The results of this study suggest that option compensation may in fact create misaligned loyalties on the part of audit committee members. The consequences of this shift in behavior can be substantial, given that audit committee members are charged with oversight of the financial reporting process. However, the results of this study also suggest that these loyalties can be realigned through the use of mechanisms put in place to improve the entire corporate governance process, namely PCAOB inspections. While these inspections were not meant to specifically impact audit committee member decisions, it would appear that this has been a positive unintended consequence.

Interestingly, the existence of previous stock option compensation did not impact the side taken by participants in the dispute. However, as indicated in Table 1, the reported average stock option compensation as a percentage of total compensation was relatively small (8.8%). Perhaps, the amount of option compensation received by participants in the past would have had to be more significant in order for it to impact

⁴ The SEC recently passed regulations to increase disclosure related to director compensation. The NYSE has expressed concerns over the use of options to compensate directors. Peter Gleason, COO of the National Association of Corporate Directors (NACD) expressed the view that eliminating options as a form of director compensation reduces controversy because any potential for manipulation just goes away.

their choices. In addition, an analysis of the remaining demographic covariates (age and gender) indicated no significant impact on the side taken in the hypothetical dispute.

The findings in this study are subject to a number of limitations. Given that participants were Executive MBA students as opposed to actual audit committee members the issue of external validity has to be considered. Although, executive MBAs have been used in the past as proxies for audit committee members (McDaniel et al 2002) there is the possibility that actual audit committee members may behave differently than the participants in this study.

In addition, actual audit committee members would have a wide array of qualitative and quantitative information to draw from when making a decision as to the appropriateness of the warranty reserve that can not be replicated in a study of this complexity and length.

Also, audit committee members are typically making this type of decision in a group setting as opposed to individually and the influences of member dominance and group processing and interaction may lead to different outcomes than those found in this paper.

This study raises several issues for future research. First, while this study investigated the impact of option compensation on audit committee member decisions, it did not explore the characteristics of companies that choose to compensate their directors with options. The question of whether this form of compensation is used intentionally as a mechanism by companies in an attempt to align audit committee members more closely with management would be an interesting issue to explore.

In addition, as mentioned previously, the impact of the audit committee decision making process as it plays out in a group setting deserves further attention. While this study examines the individual choices made by audit committee members given certain incentives/pressures, it does not explore how the ultimate outcome of these decisions may change in a group setting. The role of the financial expert and the diverse financial backgrounds that can be used to satisfy the expertise requirements as mandated by SOX increase the potential complexities of the group dynamics in an audit committee. The impact of member dominance and the potential for differing loyalties based upon factors that go beyond the variables explored in this study are fruitful areas for future research.

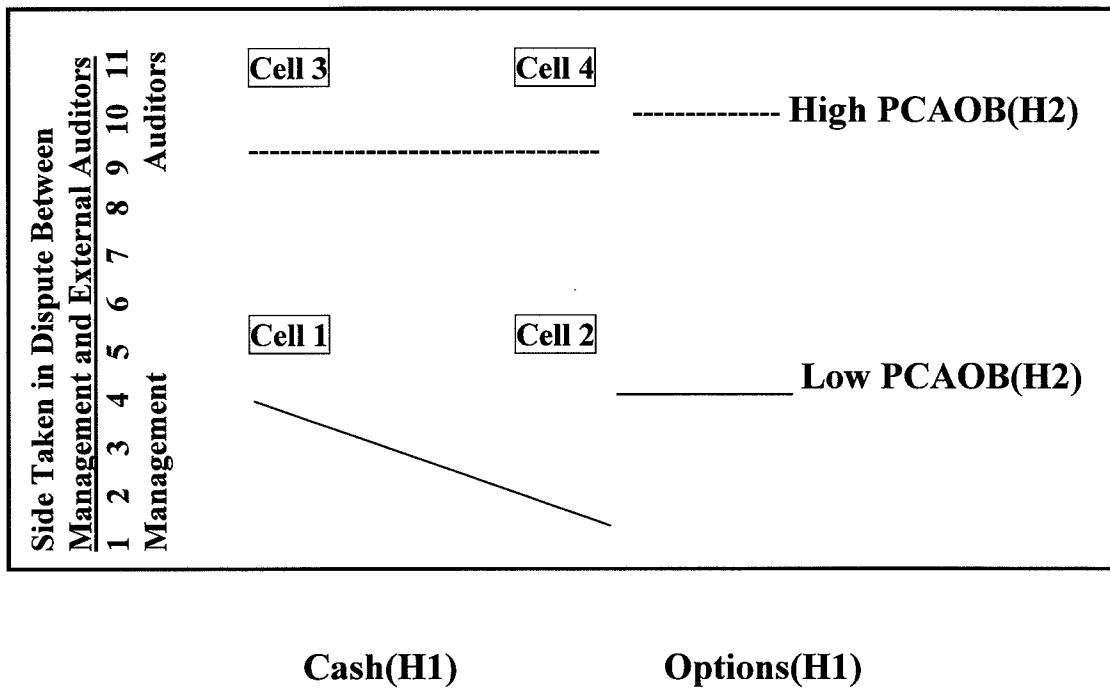


FIGURE 1

Predicted effects of form of compensation (cash or options) and likelihood of PCAOB inspection (high or low) on the side taken by audit committee members in a dispute between management and external auditors in a hypothetical audit case.

This figure depicts the predicted pattern of the side taken by participants' involving a management/external auditor dispute regarding the appropriate amount of a warranty reserve when form of compensation (cash versus options) and likelihood of PCAOB inspection (high or low) is manipulated. Participants were asked to indicate their support for either management or the external auditor on an 11-point Likert scale from 1 ("Definitely support management") to 11 ("Definitely support auditor"). This pattern is used to derive the contrast coefficient for the planned contrast to test the moderation prediction in H3. H3 predicts that subjects will show the strongest support for the auditor when likelihood of PCAOB inspection is high and the strongest support for management when the likelihood of PCAOB inspection is low and subjects were compensated primarily in the form of options. Because the consequences associated with a failed PCAOB inspection are so high, I expect that the likelihood of PCAOB inspection will moderate the incentives created by form of compensation. Therefore, the slope of high likelihood of PCAOB inspection depicted above is flat. Cell references are to the cells in Table 2, Panel D.

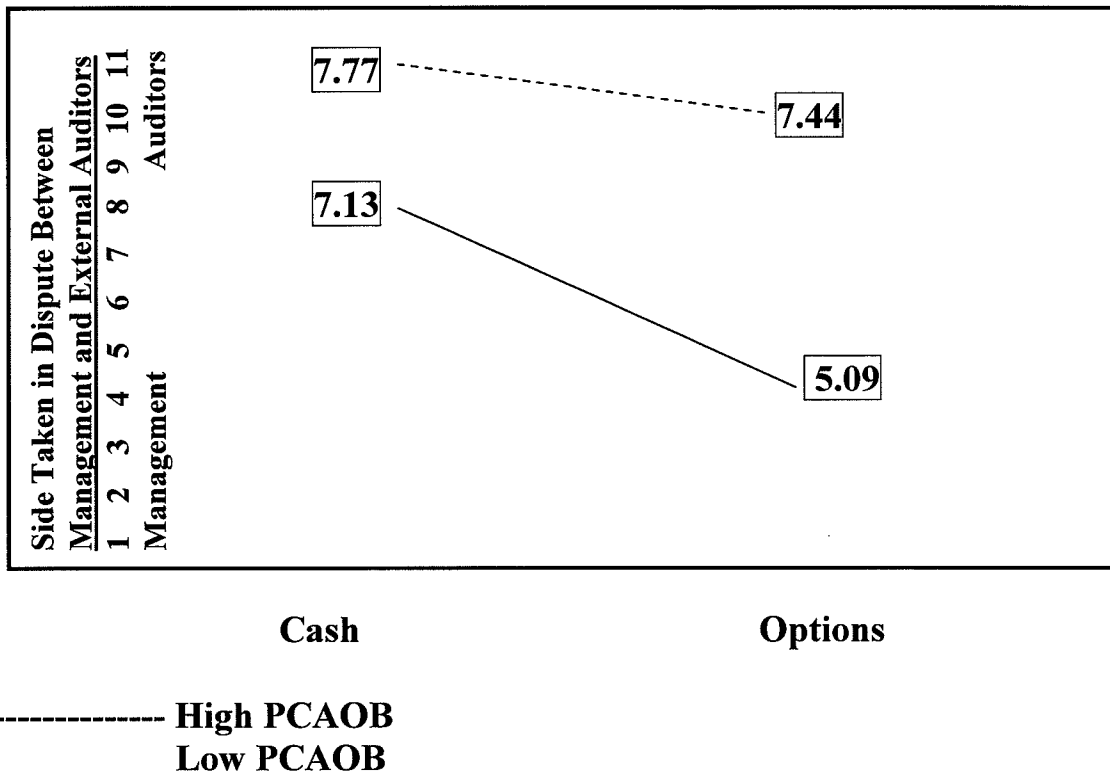


FIGURE 2

Simple effects of form of compensation (cash or options) and likelihood of PCAOB inspection (high or low) on the side taken by audit committee members in a dispute between management and external auditors in a hypothetical audit case.

This figure depicts the simple effects of the side taken by participants' involving a management/external auditor dispute regarding the appropriate amount of a warranty reserve when form of compensation (cash versus options) and likelihood of PCAOB inspection (high or low) is manipulated.. Participants were asked to indicate their support for either management or the external auditor on an 11-point Likert scale from 1 ("Definitely support management") to 11 ("Definitely support auditor"). The planned comparisons revealed that for subjects receiving primarily options as their form of compensation, a high likelihood of PCAOB inspection led to greater support for the auditors than for those with a low likelihood of PCAOB inspection ($F = 13.202, p < .01$). For subjects receiving cash as their form of compensation, likelihood of PCAOB inspection had no effect ($F = .948, p = .333$).

TABLE 1
Demographic Information of Participants

Age	Mean (s.d.) 35.41 (7.86)
Gender	<u>N = 92</u>
Male (73%)	67
Female (27%)	25
Relevant Background Information:	<u>Percentages</u>
Percentage of respondents with audit committee experience	2 %
Percentage of respondents who have participated in a PCAOB inspection	2 %
Percentage of respondents who have received option compensation	38 %
Average percentage of total compensation comprised of stock options	8.8 % ^a

^a The calculation of this percentage excludes one observation in which the participant received 100% of their compensation in the form of options.

TABLE 2
Treatment Means and Results of Testing Hypotheses H1 Through H3

Panel A: Treatment means (standard deviation) – side taken in dispute between management and external auditors^a

PCAOB Inspection ^c	Form of Compensation ^b		Marginal Means
	Cash	Options	
Unlikely	7.13(2.40)	5.09(2.07)	6.13(2.45)
Likely	7.77(2.11)	7.44(2.24)	7.60(2.16)
Marginal Means	7.44(2.26)	6.34(2.44)	6.88(2.41)

Panel B: Between-Subjects ANOVA

Source	df	Mean Square	F-statistic	p-value ^d
Form of Compensation (H1)	1	32.271	6.597	.006
Likelihood of PCAOB (H2)	1	51.313	10.490	.001
Compensation X PCAOB (H3)	1	16.705	3.415	.034
Residual	88	4.891		

Panel C: Planned Comparison

Hypothesis	Comparison (Panel C)	t-statistic	p-value ^d
(H3)	[Cell 1 – Cell 2] > [Cell 3 – Cell 4]	1.853	.034

Panel D: Comparison of Cell Means versus Mid-point

Cell	N	Mean	Mid-point	Difference	t-statistic	p-value ^d
Cash/Unlikely PCAOB(Cell 1)	23	7.13	6	1.13	2.26	.017
Options/Unlikely PCAOB(Cell 2)	22	5.09	6	.91	-2.06	.026
Cash/Likely PCAOB(Cell 3)	22	7.77	6	1.77	3.93	.000
Options/Likely PCAOB(Cell 4)	25	7.44	6	1.44	3.22	.002

Notes:

^a Participants were asked to indicate their support for either management or the external auditor on an 11-point Likert scale from 1 (“Definitely support management”) to 11 (“Definitely support auditor”).

^b Participants receiving the cash form of compensation were told “your compensation as an audit committee member consists of an annual fixed retainer of \$200,000, plus meeting fees of approximately \$40,000” while those receiving primarily options were told that their cash compensation totaled \$40,000 and “in addition, they currently hold 20,000 stock options that will vest within the next week” from which they could net \$200,000 if current market price of the stock remains the same.

^c Participants receiving the low likelihood of PCAOB treatment read “TA’s client profile and risk characteristics are average for the accounting firm that performs the annual audit of TA. Therefore, it is **unlikely** that the TA engagement will be selected by the PCAOB for inspection” the high likelihood condition read “**although** TA’s client profile and risk characteristics are average, the firm believes that due to TA’s recent acquisition, it is **highly likely** that the engagement will be selected....”

^d Results are one-tailed.

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