

AN EMPIRICAL INVESTIGATION OF AUDIT COMMITTEE DECISION QUALITY

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SUMMARY

The audit committee serves a very significant role in corporate governance.

Traditionally, the effectiveness of the audit committee has been measured through the dimensions of independence, financial expertise and diligence. However, anecdotal evidence shows that audit committees with these mandated characteristics of effectiveness still fail. Therefore, as some researchers have pointed out, a behavioral study is necessary. Thus, this study incorporates two behavioral theories, escalation of commitment and groupthink, to examine the decision quality of audit committee members. Results show that audit committee members with a responsibility for a task are less likely to follow group decision, whereas members with no responsibility seem to use group consensus as benchmark to arrive at a decision. Interestingly, the results also demonstrate that audit committee members who are not responsible for hiring the audit firm are more likely to exhibit higher dissatisfaction level with a Big 4 firm than with a regional one. The study contributes to audit committee research by capturing the interaction between two behavioral patterns.

Keywords: audit committees; escalation of commitment; groupthink; audit committee effectiveness; corporate governance; audit firm size

Data Availability: Data are available upon request.

INTRODUCTION

Recent accounting scandals, which shook the business world to its core, led to the loss of billions of dollars within a span of a few months. Consequently, the Sarbanes-Oxley Act of 2002 legislated certain responsibilities and elements of accountability that have affected audit committees. The seriousness of the audit committee's responsibilities cannot be overstated. As a liaison between external auditors and management, the audit committee is expected to render all decisions fairly and objectively. However, audit committees are susceptible to some problematic group decision-making biases. Prior research (Staw 1976; Janis 1972) points to flaws that are inherent in individual and group decision-making processes. Janis (1972), in particular, claims that groups, by their very nature, are subject to certain internal dynamics that make them vulnerable to decision failures.

To date, empirical studies on the audit committee have concentrated on examining the impact of legally-mandated audit committee characteristics such as independence, financial expertise, and diligence on corporate variables such as financial reporting quality and financial restatements. For example, several studies¹ have investigated the role of audit committee independence (Abbott, Park and Parker 2000; Beasley 1996; McMullen and Raghunandan 1996; Carcello and Neal 2003; Ho Young Lee 2003) and financial expertise (DeZoort 1998; DeZoort and Salterio 2001; Raghunandan, Read and Rama 2001; Bedard, Chtourou and Courteau, 2004; Defond, Hann and Hu 2005; Krishnan and Ye 2005; Mangena and Pike 2005) on audit committee effectiveness. The apparent emphasis of research on these characteristics and their impact on audit committee effectiveness is understandable. Undoubtedly, the pre-Sarbanes-

¹ See DeZoort, Hermanson, Archambeault, and Reed (2002) for complete literature review.

Oxley audit committees were plagued by lack of independence. Therefore, the study of characteristic issues such as independence, expertise, and diligence in relation to audit committee effectiveness is obviously important. Although these studies are highly credible in their attempt to examine the boundaries of audit committee effectiveness, there is a need to look beyond these boundaries.

While audit committee characteristics, such as independence, expertise, and diligence are very important factors that contribute to audit committee effectiveness, history reveals that the presence of these characteristics *alone* does not guarantee immunity from decision failures by groups. A glaring example which shows that mandated characteristics are a necessary but insufficient component of the audit committee effectiveness is Enron's audit committee. Almost all of the directors of Enron were independent (Paredes 2003). In addition, they were exceptionally qualified business professionals (Benston and Hartgraves 2002 as cited in Mangena and Pike 2005). Though possessing all these exemplary characteristics, Enron's audit committee was woefully ineffective in addressing questionable financial activities.

On the other hand, there are numerous examples of audit committees that lack some of these characteristics, yet exhibit impeccable governance records. According to Sonnenfeld (2002a), high-profile companies such as Home Depot, Intel, Southwest Airlines, Microsoft, and Berkshire Hathaway have several insider board members. These disturbing scenarios suggest that there are other factors that impact audit committee effectiveness, in addition to the set of mandated characteristics. Mangena and Pike (2005) stressed that "[t]he fact that corporate failures and financial irregularities occur in companies with audit committees complying with recommended best practice suggests *other factors also play a significant role* [italics added]" (343). Therefore, a study of audit committees and the group dynamics that affect their decision-

making process is warranted. Additionally, DeZoort, Hermanson, Archambeault and Read (2002) suggested that “research to date has left team/group issues faced by audit committees virtually unaddressed” (55). They also added that the current audit committee research was dominated by archival and survey studies and that “psychology-based experimental research involving audit committee member judgment and decision-making [was] less common” (DeZoort et al. 2002, 69). Moreover, Turley and Zaman (2004) suggested future research on audit committees in relation to “unintended (behavioral) as well as expected consequences” since the mere presence of the mandated characteristics may not necessarily result in stronger corporate governance (305). Therefore, we examine two theories that help explain the decision failures of groups: *escalation of commitment* and *groupthink*. Escalation of commitment theory posits that when individuals are initially responsible for a decision, and they perceive the resultant negative consequence as personal failure, they are more likely to escalate their commitment to the failed course of action (Staw 1976). On the other hand, Janis (1972) defined groupthink as “a mode of thinking that people engage in when they are deeply involved in cohesive in-group, when the members’ striving for unanimity override their motivation to realistically appraise alternative courses of action” (9). Thus, the study attempts to answer the following pertinent questions in relation to audit committees:

1. Will an audit committee member continue to escalate his/her support to a previous decision with negative consequences due to personal responsibility?
2. Is an audit committee member susceptible to groupthink?
3. Does the interaction of the two behavioral biases (escalation of commitment and groupthink) exacerbate the deterioration of the decision quality?

We employ a field experiment using audit committee members as subjects to investigate whether members are susceptible to escalation and/or groupthink tendencies. We find an

interesting interaction between these two theories. Our results suggest that audit committee members with no responsibility for a particular action were more inclined to follow group consensus, whereas members with responsibility were not affected by group decision. We also investigate the impact of audit firm's size on audit committee members' decision/satisfaction as well as possible interactions with escalation of commitment and groupthink tendencies. We find a significant interaction between audit committee members' satisfaction with audit firm and audit firm size. Members who did not hire the firm were more inclined to be dissatisfied with a Big 4 audit firm than with a regional auditor. Members who hired the firm were more likely to be satisfied with a Big 4 than members who did not hire. The following sections will address the theoretical foundation, methodology as well as results and discussion.

THEORETICAL BACKGROUND AND HYPOTHESES

Escalation of Commitment

This paper examines two theories of human behavior that explain the potential pitfalls of decision-making. The first theory deals with escalation of commitment which posits that an individual will continue to support a failing operation if he/she is initially responsible for initiating it (Staw 1976). Why do people escalate their commitment to a failing course of action? Staw (1976) argued that decision makers might increase their commitment to an endeavor, in the face of a negative consequence, in order to justify their previous behavior. Brockner (1992), in his attempt to explain Festinger (1957), stated that "people do not like to admit that their past decisions were incorrect; what better way to (re)affirm the correctness of those earlier decisions than by becoming even more committed to them?" (40). Implied in the concept of self-justification is the element of "personal liability" or "personal responsibility". This implication advances the idea that personal responsibility leads to self-justification by decision makers. In

other words, when decision makers are personally responsible for a course of action that resulted in negative outcomes, they justify their behavior by becoming more committed to the failing course of action rather than admitting failure.

Several researchers have examined escalation tendencies by individuals under different decision domains. These decision domains include, but are not limited to, investment decisions (Staw 1976), internal auditing (Brody and Kaplan 1996), loan evaluation judgment (Jeffrey 1992), and human resources (Caldwell and O'Reilly 1982; Bazerman, Beekun & Schoorman 1982). Previous research examining the problem of escalation of commitment in relation to audit committees is non-existent. Therefore, this study extends escalation of commitment research to the corporate governance domain.

While most of the studies associated with this behavior involve an examination of an individual's escalation of commitment, other researchers have examined escalation tendencies by groups (Bazerman, Giuliano and Appelman 1984; Rutledge 1994; Whyte 1993). The results demonstrated that both individuals and groups in responsibility conditions escalated their commitment.

In order to measure escalation tendencies by audit committee members, we chose the task of retaining/terminating an external auditor. The choice of the task is deliberate. First, one of the mandated duties of audit committees under the Sarbanes-Oxley Act of 2002 is the hiring, retaining, and overseeing of the external auditor. Second, research has demonstrated escalation tendencies by decision makers in areas of personnel hiring. Prior research shows that decision makers with the responsibility of hiring/promoting personnel are more likely to defend the employee (Caldwell and O'Reilly 1982), more likely to give optimistic predictions about the employee's future (Bazerman et al. 1982) and more inclined to decide in favor of the employee

involving negative personnel decisions such as layoff and termination (Citera, Isaacs and Berrill-Ross 2000). Third, it is a very prevalent activity. According to Turner, Williams and Weirich (2005), in the two year period following the passage of the Sarbanes-Oxley Act, over 2500 companies changed auditors. This staggering number of auditor changes reveals the magnitude of personal responsibility that rests on the shoulders of the audit committee as a result of this task. The personal responsibility that comes with the duty of hiring the external auditor is stipulated to create an escalation of commitment tendency for audit committee members when decision-making dilemmas arise due to disputes between the auditor and management. Several factors justify this stipulation.

First, the task of hiring the external auditor is very important since the performance of the external auditor is likely to be perceived as reflecting the decision quality of the audit committee (Buchalter and Yokomoto 2003).

Second, there is a reputational cost at stake for the board of directors, in general, and audit committee members, in particular (Srinivasan 2005). Third, there is a negative connotation associated with auditor switches. Some studies show that the stock market reacts negatively when companies change auditors (Fried and Schiff 1981; Lu 2006). Therefore, to test the impact of escalation of commitment on personnel decisions of the audit committee, the following hypothesis is offered:

H1: An audit committee member who participated in the decision to hire the current independent auditor is more likely to retain the auditor than an audit committee member who did not participate in the decision to hire.

Groupthink

Even though there are several studies that exhibit the superiority of group decision making over the individual (Watson, Michaelsen, and Sharp 1991; Stocks and Harrell 1995;

Blinder and Morgan 2000; Morgan and Tindale 2002), there are group-specific factors that predispose members to make faulty decisions. As Carpenter (2004) stated, “groups may be more influenced than individual decision makers by some of the biases that negatively affect decision making...being overly susceptible to persuasion” (8). In fact, Janis (1972) maintained that “the advantages of having decisions made by groups are often lost because of psychological pressures that arise when the members work closely together, share the same values etc.” (13).

One theory that explains group decision-making processes is groupthink (Janis 1972). According to Janis (1972), groups are susceptible to faulty decision making because members may stifle their legitimate concerns about a course of action in order to preserve unity. He maintained that one of the preconditions for groupthink is group cohesiveness, or “esprit de corps” (13). Hence, members would “self-censor” and refrain from taking a strong stand against the group consensus (Janis 1982, 175). Several researchers (Raven 1974; Hart 1990; Smith 1984) have conducted case studies and have identified symptoms of groupthink in major decision fiascos involving high-level government officials.

There has been renewed interest in groupthink theory due to the recent corporate scandals. Scharff (2005) identified several symptoms of groupthink such as “pressure to conform” and “illusion of invulnerability” in the corporate culture of WorldCom. Enron’s audit committee was faulted for taking a passive role and not raising legitimate inquiries about the questionable activities of the executives in the organization. It has been suggested that this passive reaction was a consequence of groupthink tendencies (Paredes 2003; Sonnenfeld 2002b).

The Sarbanes-Oxley Act of 2002 has charged the audit committee with significant duties. The audit committee will have to make serious decisions, especially when disagreements arise between the external auditor and company management. In light of the theoretical and factual

assessments, it is possible that audit committees are prone to groupthink. This study utilizes one of the audit committees' mandated tasks, oversight over external auditor, as a proxy for other decisions to test the presence of groupthink. Accordingly, it is hypothesized that:

H2a: An audit committee member is more likely to vote to retain the current auditor when other committee members are inclined to RETAIN than when the inclination of the other committee members is UNKNOWN.

H2b: An audit committee member is more likely to vote to replace the current auditor when other committee members are inclined to REPLACE than when the inclination of the other committee members is UNKNOWN.

The measurement of groupthink tendencies using two different hypotheses is necessary since it cannot be assumed that the same behavioral response prevails under a positive as well as negative condition. In addition, prior research (Citera et al. 2000) demonstrates that decision makers view negative personnel decisions, such as laying off or demoting an employee, differently from other employment-related decisions.

METHODOLOGY

Subjects for this study consisted of audit committee members who are members of KPMG's Audit Committee Institute. A pilot study was conducted involving audit committee members attending the Institute's Fall 2006 Audit Committee Roundtable program. Based on the opinion responses of the audit committee members, the instrument (Appendix A) was modified accordingly. Instruments were mailed to national audit committee members², and the package included a letter of request, the instrument, demographic data page, and an Institutional Review Board (IRB) Approval form.

² The Audit Committee Institute supplied the mailing database.

Task

Individual audit committee members made decisions based on a hypothetical scenario involving the decision of retention or replacement of the external auditor, as well as judgment of the satisfaction level with the external audit firm. The task of hiring an external auditor served as a proxy to mirror other significant decisions made by audit committees that are difficult to test within the constraints of a laboratory and field experiment conditions.

The instrument (Appendix A) is a modified version of Libby and Kinney (2000). The task required audit committee members to indicate if they would retain or replace the external auditor by responding on a 7-point scale with extreme points anchored at “Definitely Retain” and “Definitely Replace”. In order to enhance the understanding of their decisions, another dependent variable was added which measured their satisfaction level with the auditor. The audit committee members were required to report their satisfaction level with the external auditor on a similar 7-point scale with extreme points anchored at “Very Satisfied” and “Very Dissatisfied”.

A field experiment was employed and utilized a 2x2x3 factorial design with three independent variables, RESPONSIBILITY, GROUP INCLINATION and AUDIT FIRM SIZE. The analysis used two dependent variables, LIKELIHOOD TO REPLACE THE CURRENT AUDITOR and SATISFACTION WITH THE CURRENT AUDITOR. Subjects were randomly assigned to treatment groups.

In order to test for presence of escalation of commitment tendencies (H1), the independent variable RESPONSIBILITY was manipulated at two levels: HIGH RESPONSIBILITY and LOW RESPONSIBILITY. Individual audit committee members in the HIGH RESPONSIBILITY condition were told that they were a part of the initial hiring decision, whereas audit committee members in the LOW RESPONSIBILITY condition were informed

that the previous audit committee hired the current auditor. In order to test for the main effects of groupthink (H2a, H2b), the independent variable GROUP INCLINATION was manipulated at three levels: RETAIN, REPLACE and UNKNOWN. Individual audit committee members were asked to make a decision to retain or terminate the current auditor under three different GROUP INCLINATION manipulations. Subjects in the RETAIN group were told that the other two audit committee members were inclined to retain the external auditor while subjects in the REPLACE group were informed that the other two audit committee members were inclined to replace the external auditor. Subjects in the UNKNOWN (control group) were told that the inclination of the other two audit committee members' was unknown.

Since prior research (DeAngelo 1981; Geiger and Rama 2006) demonstrated that high audit quality was associated with audit firm size, and that there is a positive public perception about large accounting firms (McKinley, Panny and Reckers 1985; Kane and Velury 2004), we included AUDIT FIRM SIZE as a third manipulation. Subjects were told that the external auditor was either a Big 4 accounting firm or a regional accounting firm.

During data collection process 2075 instruments were mailed to audit committee members³, and 246 responses were received resulting in an 11.85% response rate. Seventeen instruments were discarded since nine participants did not answer both questions while eight respondents were not audit committee members, resulting in 229 completed instruments.

³ In addition to the observations collected through the mail, a smaller set of data was collected in two continuing education training events. However, this collection did not yield enough observations per cell to analyze and is not included in the analysis described here.

At the end of the instrument, participants completed a demographic questionnaire in relation to gender, age, professional certification, education, corporate governance (audit committee member, corporate officer etc.), number of audit committees served, status on the audit committee (chair, financial expert etc.), years of service on a committee, and number of audit committee meetings. Table 1 shows the demographics of the participants.

(Insert Table 1 here)

Data Analysis

A 2x2x3 between-subjects, factorial design applying analysis of covariance (ANCOVA) was used to test for main effects of the three independent variables and possible interactions. The covariates in question were AGE, GENDER, EDUCATION, CERTIFICATION, AUDIT COMMITTEE STATUS (i.e. chair, financial expert etc.), NUMBER OF COMMITTEES SERVED, AVERAGE NUMBER OF MEETINGS, AVERAGE NUMBER OF YEARS SERVED, and COLLECTION METHOD. None of the covariates were significant predictors of the dependent variable at the .05 significance level. Accordingly, an ANOVA was used for data analysis. The model for the final data analysis was:

$$\text{Likelihood to Replace the Current Auditor} = \text{Responsibility} + \text{Group Inclination} + \text{Firm Size} + \text{Firm Size} * \text{Responsibility} + \text{Firm Size} * \text{Group Inclination} + \text{Responsibility} * \text{Group Inclination} + \text{Firm Size} * \text{Responsibility} * \text{Group Inclination}$$

The ANOVA results for the dependent variable, “Likelihood to Replace the Current Auditor” showed no significant main effects for any of the independent variables. Therefore, H1, H2a and H2b were not supported. However, the results demonstrated a significant interaction for RESPONSIBILITY by GROUP INCLINATION ($F=3.71$; $p=.03$). The ANOVA table is depicted in Table 2.

(Insert Table 2 here)

The means for the interaction of RESPONSIBILITY*GROUP INCLINATION are presented in Table 3 and a graphical depiction of the interaction is presented in figure 1.

(Insert Table 3 and Figure 1 here)

A casual observation of the mean scores for audit committee members who did not hire the auditor as depicted in Table 3 showed that members, who did not hire the audit firm, were more likely to follow the group consensus. When the other two committee members decided to retain the auditor, individual audit committee members in the LOW responsibility group were more likely to retain (3.86) compared to members in the UNKNOWN group decision (4.69). Correspondingly, when the group decided to replace the auditor, audit committee members who did not hire the firm were more likely to replace the auditor (4.85) compared to members in the UNKNOWN group decision (4.69). It must be noted that the lower the mean scores, the more likely the audit committee member would retain the current auditor. Therefore, the result showed that audit committee members who were not responsible for hiring the external auditor were more likely to follow the group consensus. A consequent simple main effect analysis revealed that there was a statistically significant mean difference between RETAIN and UNKNOWN ($p=.01$) and between RETAIN and REPLACE ($p=.003$) for audit committee members who did not hire the auditor (Table 4).

(Insert Table 4 here)

Audit committee members who were not responsible for hiring the external auditor were more likely to follow the group especially when the group consensus was to RETAIN. The significant mean difference between RETAIN and REPLACE indicated that the responses of audit committee members in the REPLACE condition were significantly different from the responses

in the RETAIN group condition or vice versa. In other words, the presence of explicit group consensus made a marked difference on the individual audit committee responses. The non-significant mean difference between responses under the REPLACE condition and the UNKNOWN condition ($p=.57$) for audit committee members in the LOW responsibility condition is understandable when it is analyzed in light of the response for the UNKNOWN condition. In this study, the UNKNOWN condition serves as a control variable. According to the mean scores (4.69), audit committee members, with no hiring responsibility and in a scenario where the group's decision was UNKNOWN, were more likely to replace the external auditor. Thus, the mean score for audit committee members in the REPLACE condition (4.85) can be interpreted as a confirmatory response since they were already inclined to replace the auditor.

On the other hand, audit committee members in the HIGH responsibility condition did not seem to be affected by group decision. There were not significant mean differences in the responses of audit committee members in the HIGH responsibility condition: RETAIN (4.43), REPLACE (4.28), and UNKNOWN (4.24). In general, the RESPONSIBILITY by GROUP INCLINATION interaction showed that audit committee members who were not responsible for hiring the external auditor were more inclined to follow the group decision or were more susceptible to groupthink tendencies, whereas audit committee members responsible for hiring the firm did not seem to be affected by the group decision. Responsibility for hiring the audit firm seemed to mitigate the effect of groupthink tendencies.

Satisfaction with the Current Auditor

The second question in the study measured respondents' satisfaction level with the external auditor. Thus, the second set of data analysis used satisfaction level scores as the

dependent variable and RESPONSIBILITY, GROUP INCLINATION, and FIRM SIZE as the independent variables, and the model used for the analysis is as follows:

$$\text{Satisfaction with the Current Auditor} = \text{Responsibility} + \text{Group Inclination} + \text{Firm Size} + \text{Firm Size} * \text{Responsibility} + \text{Firm Size} * \text{Group Inclination} + \text{Responsibility} * \text{Group Inclination} + \text{Firm Size} * \text{Responsibility} * \text{Group Inclination}$$

Even though all demographic variables were entered as control, only AGE was significant ($F=4.065$, $p=.045$). Since AGE was the only significant demographic variable, testing for homogeneity of regression coefficients was done for any significant interaction between AGE and the independent variables. The results showed a marginally significant ($F=3.805$, $p=.052$) AGE*FIRM SIZE interaction. Therefore, the demographic variable AGE was not used as a covariate. The ANOVA analysis using satisfaction with the independent auditors as the dependent variable produced no significant main effects, but a significant FIRM SIZE*RESPONSIBILITY interaction ($F=4.69$, $p=.03$).

(Insert Table 5 and Figure 2 here)

The means for the interaction RESPONSIBILITY*FIRM SIZE are depicted in Table 6. As shown, a simple effects analysis of the mean scores revealed that audit committee members who did not hire the external auditor reported significantly higher levels of dissatisfaction ($p=.049$) with a Big 4 auditor (mean = 4.37) than with a regional firm (mean=3.86). For audit committee members who hired the external auditor, there was not a significant difference (.40) in satisfaction level based on audit firm size (Table 6).

However, the satisfaction level towards a Big 4 firm was significantly higher ($p=.05$) for audit committee members in the HIGH responsibility condition than for audit committee members in the LOW responsibility condition (Table 6). Plausible considerations that would

explain these reported behaviors by audit committee members will be discussed in the following section.

(Insert Table 6 here)

DISCUSSION OF RESULTS

Even though it was predicted that an audit committee member with hiring responsibility was more inclined to escalate his/her support for the controversial auditor than an audit committee member who did not have the hiring responsibility (H1), it was not supported. One plausible explanation merits the following discussion. Several studies on escalation tendencies examined an individual's or a group's behavior under escalation situations. This study is unique, however, since it investigated an individual audit committee member's decisional behavior in a group context. Whyte (1991) examined the escalation tendencies of individuals within a group context and found "group decision making...might reduce the escalation tendency by diffusing responsibility for initiating a failing project" (408). In like manner, audit committee members in this study had collective responsibility but not individual responsibility. However, they were asked to make the retaining/replacing decision as individual committee members. Therefore, this diffusion of responsibility could account for lack of escalation tendencies among audit committee members with hiring responsibilities.

In order to capture groupthink influences on audit committee member's decisions, it was predicted that an audit committee member would vote to retain the external auditor if group consensus was to retain, and would decide to replace the auditor if group decision was to replace the firm, compared to his/her respective decision if the opinions of the peers were unknown (H2a and H2b). However, H2a and H2b were not supported.

Nevertheless, the analysis resulted in a significant interaction between GROUP INCLINATION and RESPONSIBILITY ($F=3.71$, $p=.03$). The resultant interaction demonstrated that audit committee members, who were not responsible for hiring the external auditor, were more likely to follow the group consensus whereas audit committee members with hiring responsibility did not seem to be affected by the group decision (Table 4). It demonstrates that responsibility for an action may minimize groupthink inclinations by audit committee members. There is a latent implication to this stipulation. One can argue that a high turnover of audit committee members may cause a loss of the sense of responsibility which ultimately may lead to a dysfunctional behavior such as groupthink. Sori, Mohamad and Abdul Hamid (2001) voiced their concern about audit committee assignments and suggested a 5-year term as a basic tenure. Therefore, future research examining the role of audit committee turnover and issues of responsibility is recommended.

Additionally, the result showed that audit committee members with hiring responsibility were less likely to follow group consensus. The behavior of audit committee members, with hiring responsibility, is understandable. First, one of the Sarbanes-Oxley mandated duties of audit committee members is the hiring, firing and oversight of the external auditor. The seriousness of this responsibility is magnified by the memory of the recent accounting scandals, and audit committee members' unwillingness to submit to group pressure suggests the seriousness with which they approach the responsibility. Future research, investigating whether this result (responsibility mitigating groupthink tendencies) is unique to post-Sarbanes-Oxley audit committee members or if it is generalizable to other decision makers is warranted.

The finding concerning audit committee members with no hiring responsibility is troubling since it demonstrates that audit committee members used group consensus as a bench

mark to arrive at a decision. Follow-up analysis indicated that the inclination by audit committee members to follow group consensus was significantly strong especially when the decision of the other two members was to retain the external auditor (Table 4). The following discussion presents a plausible explanation.

First, research shows the adverse effect of auditor switches on investors' perceptions (Fried and Schiff 1981; Grayson and Luehlfling 2006). Most of the audit committee members in this study were highly experienced members of the investment community, and they were made aware of this fact in the instrument provided in the study. Therefore, their strong vote to retain the audit firm, even though they were not responsible for making the hiring decision, is understandable.

Second, the cause of the disagreement was a consistent audit fee increase by the external auditor. In light of the recent exorbitant fee increases by audit firms due to Sarbanes-Oxley Act Section 404⁴, audit committee members might not have deemed it as a sufficient reason for changing the external auditor. According to Taub (2005), audit fees increases for all the Big 4 audit firms ranged from 78 percent to 134 percent. Third, changing an auditor is a very costly process (GAO, 2004). The audit committee members in this study may have already gone through such costly auditor changes since there have been a flurry of auditor switches after the Enron debacle due to the sudden collapse of Arthur Andersen (Eikner, Morris and Butler 2006) and the adoption of a more conservative policy of retention/acceptance of clients by the Big 4 accounting firms (Bryan-Low 2003). Therefore, considering the recent legislative changes

⁴ Section 404 of Sarbanes-Oxley Act of 2002 requires auditors to issue an attestation report on management's assessment of the effectiveness of internal control (SEC).

affecting audit work and the costs associated with them, the significant inclination of these audit committee members towards retention of the external auditor is comprehensible.

As presented in Table 5, the results indicated a significant interaction between FIRM SIZE and RESPONSIBILITY ($F=4.69$, $p=.03$). In other words, audit committee members, who were not responsible for hiring the external auditor, were more likely to be dissatisfied with the Big 4 auditor than with a regional firm due to audit fee disagreements.

The heightened level of dissatisfaction with Big 4 audit firms by the audit committee members in the LOW responsibility condition is understandable considering the exorbitant fee increases by the Big 4 since the enactment of the Sarbanes-Oxley Act of 2002 (Taub 2005). However, the interesting aspect of this result was that the increased level of dissatisfaction was more pronounced for audit committee members who were not responsible for hiring the audit firm. Previous studies (Bazerman et al. 1982; Citera et al. 2000) have shown that evaluators in LOW responsibility conditions were more likely to evaluate the ratee more negatively than evaluators in the HIGH responsibility condition when there was a below-par performance by the ratee.

In addition, the results demonstrated that audit committee members in the HIGH responsibility condition were more likely to be satisfied with a Big 4 audit firm than audit committee members in the LOW responsibility condition. The favorable bias towards Big 4 accounting firms is consistent with previous studies involving audit firm size (McKinley et al. 1985; Teoh and Wong 1993; Kane and Velury 2004). The result suggests that responsibility for hiring the external auditor enhances a positive perception towards large accounting firms. Therefore, future research investigating the relationship between responsibility and audit firm perception is warranted.

A casual observation of both significant interaction results suggest that even though audit committee members in LOW responsibility conditions were greatly dissatisfied with the firm due to fee increases, they were reluctant to replace the auditor. One of the possible explanations for this behavior is the fact that audit committee members were made aware of the reputational cost to the company associated with auditor change (Appendix A). If, indeed, audit committee members hesitated to take necessary actions against the external auditor due to this misconception, it signals a troubling message about their judgment. However, their concern is not without merit. Several writers have alluded that the culprit for this negative perception surrounding the change of an audit firm is the SEC's disclosure rules concerning auditor switches.

Fusco (2006) and Nusbaum (2005) argued that the problem of negative perception attached to auditor changes could be traced to the current SEC auditor change reporting regulations that require companies to report auditor changes and to disclose the reasons if the change was for any of the "reportable events" such as inadequate internal controls and/or auditor's inability to rely on management's representations (Whisenant, Srinivasan, and Raghunandan 2003). Since "the only required disclosures are negative...thus, over time, an auditor change has become a 'red flag' that problems may exist with a company's financial statements, making many companies reluctant to change firms—even if they would be changing for the right reasons" (Fusco 2006, para 7). Fusco (2006) and Nusbaum (2005) suggested that the SEC should change its rules by requiring all companies to state their reasons for changing the auditor regardless of the type of disagreements. They argued that the explicit presentation of positive reasons for auditor changes would eventually overcome the negative perception about auditor switches.

Contributions and Limitations

This study is very important in light of the enormous responsibilities placed on the audit committee by the Sarbanes-Oxley Act of 2002. The results of this study contribute to the body of knowledge in terms of research, public policy and practice. First, research on audit committees, to date, has focused on archival and survey studies involving mandated characteristics of audit committees to measure effectiveness. Thus by employing two behavioral theories to examine the decision quality of audit committee members in a field experiment context, this study has attempted to answer the professional call by researchers (DeZoort et al. 2002; Turley and Zaman 2004) and close the gap in the extant literature as well as extend the stream of research into previously unexplored areas such as corporate governance.

In addition to its contribution to research, the findings of this study have public policy implications. The results showed that audit committee members, who did not have personal as well as collective responsibility for hiring the external auditor, were reluctant to replace the external auditor even though they were markedly dissatisfied with the firm. Since audit committee members were aware of the reputational cost involving auditor switches, we stipulate that the fear of negative publicity was the reason for the reluctance. It is very reasonable to think that the SEC reporting rules which concentrate on negative circumstances do have an impact on the perception of the investing community. Therefore, the SEC needs to address these issues and make required revisions to its rules. Additionally, future research that investigates the effect of such policy-oriented perception on audit committee members' judgments is warranted.

Third, the study has significant implications to practice. Audit committee members were strongly dissatisfied with Big-4 audit firms involving increased audit fee issues. The relationship between audit committee members and external auditors is very crucial. Audit committee

members are entrusted to protect the independence of the external auditor. The external auditor, on the other hand, is expected to act as the watchdog of the public investment. Therefore, such a marked dissatisfaction by audit committee members with the external auditor may adversely affect the proper functioning of this relationship. Therefore, future research involving audit fees and audit committee members' perception is very essential.

The study has limitations. This research was conducted in a post-Enron, post-Sarbanes-Oxley environment. The demise of such corporations such as Enron and WorldCom still resonates in the minds of audit committee members. Therefore, even though the study attempted to neutralize task-specific extraneous variables, members might have been too cautious in their responses.

Additionally, the data was collected based on self-reported information derived from audit committee members. This might have minimized the objectivity of the data, a typical problem associated with such studies.

Moreover, the study was based on a three-member audit committee size as recommended by the Blue Ribbon Committee (BRC 1999). It cannot be determined whether the three-member size exacerbated or minimized escalation as well as groupthink tendencies. Previous studies (Littlepage and Silbiger 1992; Hwang and Guynes 1994) have demonstrated that larger groups made more accurate and efficient decisions. Therefore, for purposes of triangulation, similar research involving larger audit committees may shed light on the optimal size of the audit committee.

Table 1. Demographic Data.

DEMOGRAPHIC VARIABLES			
GENDER	Male	207	90.4%
	Female	22	9.6%
AGE	30-39	2	.9%
	40-49	12	5.2%
	50-59	75	32.8%
	60+	140	61.1%
EDUCATION	High School	5	2.2%
	Undergraduate	63	27.5%
	Graduate	151	65.9%
	Other	9	3.9%
CERTIFICATION	CPA	54	23.6%
	Attorney	23	10.0%
STATUS	Chair	33	14.4%
	Financial Expert	34	14.8%
	Both	86	37.6%
	Member	76	33.2%
Average Number of Audit Committees Served		1.81	
Average Years of Service		4.5	
Average Number of Committee Meetings		6.8	

Table 2
ANOVA - Dependent Variable: Likelihood To Replace the Current Auditor

SOURCE	df	F	Sig.
Firm Size	1	1.28	.26
Responsibility	1	.62	.43
Group Inclination	2	1.78	.17
Firm Size*Responsibility	1	.35	.55
Firm Size*Group Inclination	2	.62	.54
Responsibility*Group Inclination	2	3.71	.03
Firm Size*Responsibility*Group Inclination	2	.72	.49

Table 3. Means for RESPONSIBILITY*GROUP INCLINATION interaction

RESPONSIBILITY		GROUP INCLINATION		
		RETAIN	REPLACE	UNKNOWN
RESPONSIBILITY	HIGH (Hired Auditor)	4.43	4.28	4.24
	LOW (Did not hire Auditor)	3.86	4.85	4.69

Table 4. Post-hoc Analysis for Mean Differences

	GROUP INCLINATION		MEAN DIFFERENCES	Sig.
	Hired Auditor	Retain	Replace	.15
Retain		Unknown	.19	.55
Replace		Unknown	.04	.73
Did not Hire Auditor				
	Retain	Replace	-.99	.003
	Retain	Unknown	-.83	.01
	Replace	Unknown	.16	.57

Table 5. ANOVA Dependent Variable: Satisfaction with the Current Auditor

SOURCE	df	F	Sig.
Firm Size	1	.55	.46
Responsibility	1	.26	.61
Group Inclination	2	.30	.74
Firm Size*Responsibility	1	4.69	.03
Firm Size*Group Inclination	2	2.53	.08
Responsibility*Group Inclination	2	.84	.43
Firm Size*Responsibility*Group Inclination	2	.69	.50

Table 6. Means for RESPONSIBILITY*FIRM SIZE interaction and Simple Effects Analysis

RESPONSIBILITY		FIRM SIZE		Simple Effects Analysis
		BIG 4	REGIONAL	
RESPONSIBILITY	HIGH (Hired Auditor)	3.90	4.15	.40
	LOW (Did not Hire Auditor)	4.37	3.86	.049
Simple Effects Analysis		.05	.26	

Figure 1. RESPONSIBILITY*GROUP INCLINATION Interaction

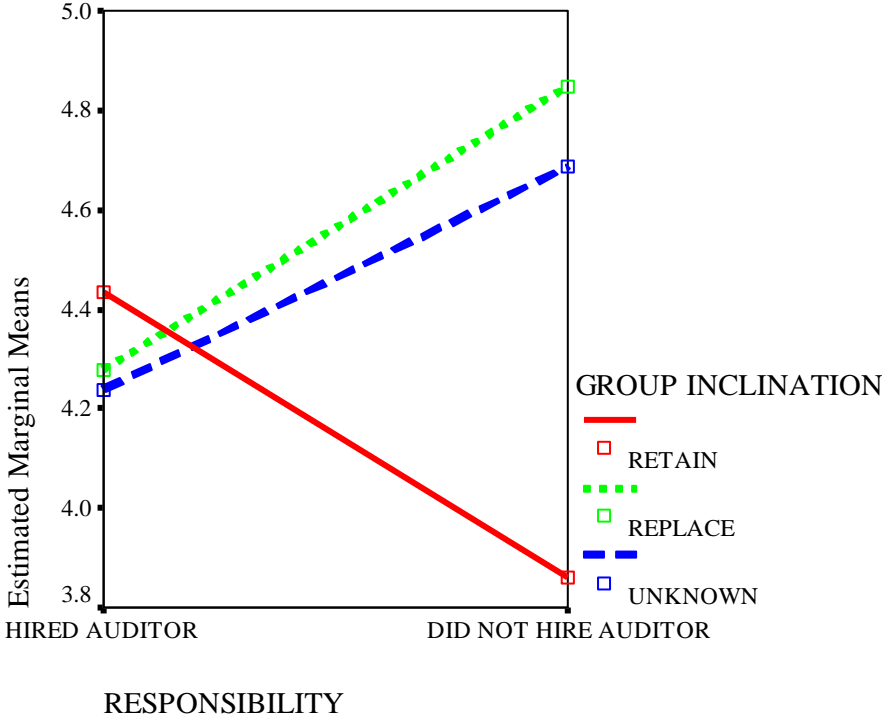
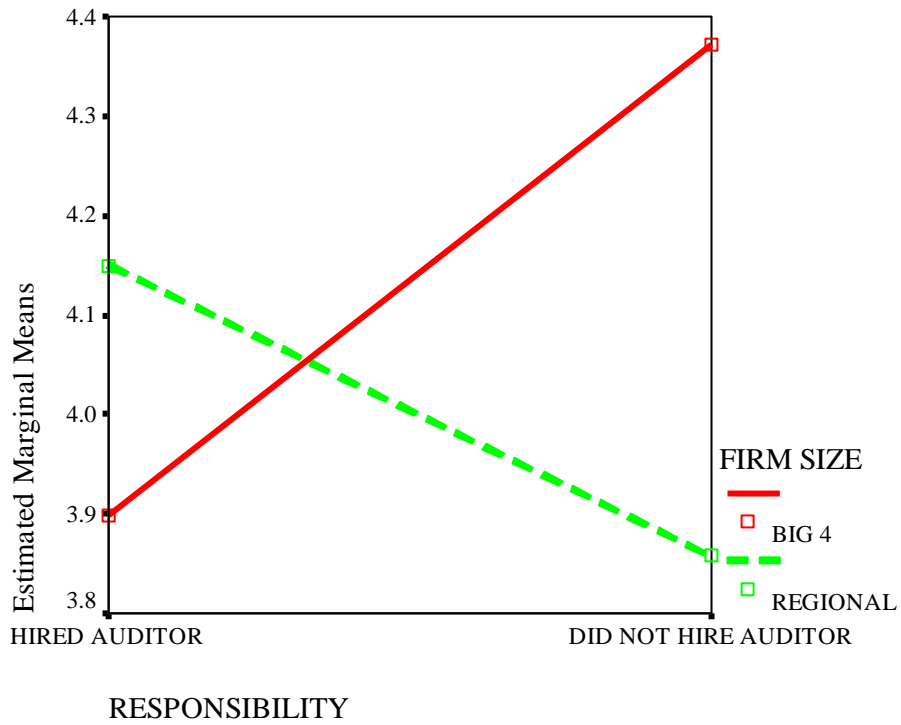


Figure 2. RESPONSIBILITY by FIRM SIZE Interaction



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APPENDIX A

One of the major accomplishments of the Sarbanes-Oxley Act of 2002 was to define the responsibilities of the audit committee. One of these responsibilities deals with “appointment, compensation and oversight” of the external auditor. This is a very important duty of an audit committee member in terms of financial reporting integrity.

Assume you are one of three members of the current audit committee for Capital Auto Parts, Inc. (CAP, Inc.), a publicly traded company. CAP, Inc. is a medium-sized automobile parts manufacturer that sells to automakers and to auto parts wholesalers. CAP, Inc. has experienced moderate but steady growth in the recent years.

As a member of the audit committee, you are entrusted with the oversight of the external auditor and the fiscal responsibility of the company. You and your two fellow audit committee members have comprised the audit committee for CAP, Inc. for the last three years. One of the first activities undertaken **when you and your colleagues joined the audit committee/ by the previous audit committee** was to hire one of the **Big 4/regional** audit firms to be the external auditor for CAP, Inc. This audit firm was chosen from a pool of three other similar Big 4 audit firms. At the time of selection, the fees bid by all three firms for the engagement were competitive. In each of the past three years, CAP, Inc. has received an unqualified audit report and the audit committee has been generally satisfied with the quality of the audit.

For each of the past three years, the audit firm, hired by the current audit committee, has increased the audit fees significantly. There has been little change in the activities of the business and in the nature of the audit work. In a recent meeting with the auditors, the auditors contended that the nature and scope of audit work involved with CAP, Inc. justified the fee increase.

You and your colleagues on the audit committee are aware that other Big 4 audit firms can provide similar audit services. However, you are also aware of the possibility of a strong negative stock market reaction due to an auditor change. In a recent meeting, the audit committee had a thorough discussion to review the external audit firm. After this conference, **you feel certain that the other two members of the audit committee are inclined to retain/replace/ you are uncertain how the other two members of the audit committee feel about replacing or retaining the external auditor.**

Based on the above information, what is **your inclination** concerning RETAINING or REPLACING the current external audit firm? (Circle one of the numbers on the scale below.)

1 2 3 4 5 6 7

Definitely Retain

Definitely Replace

Based on the above information, what is **your overall satisfaction level** regarding the current external audit firm? (Circle one of the numbers on the scale below.)

1 2 3 4 5 6 7

Very Satisfied

Very Dissatisfied