

THREE STUDIES OF AUDITOR INDEPENDENCE

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(ABSTRACT)

This dissertation investigates auditor independence by examining the effects of various factors on independence, both in fact and as perceived by several distinct groups. The first study examines the effects of auditing students' cognitive moral development and client risk on students' judgments related to an audit partner's acquiescence to client pressure in an earnings management scenario. The results indicate that students with higher levels of moral reasoning evaluated earnings management as less ethical and were also less likely to accept earnings management by an audit client. The results also indicate that subjects in a high client risk scenario evaluated earnings management as less ethical and were also less likely to accept earnings management by an audit client. Furthermore, this study investigated whether client risk moderates the effect of cognitive moral reasoning on ethical judgments and behavioral intentions. The results do not indicate an interaction.

The second and third studies deal with potential consequences associated with the *perceived* impairment of auditor independence. Specifically, the second study deals with the effects of auditor-provided non-audit services on the client company's bond rating. If financial statement users *believe* that auditors providing non-audit services impairs the auditor's independence, they are likely to recognize an increase in information risk associated with such impairment (Johnstone et al. 2001). This could occur regardless of the true nature of the auditor's independence and would suggest a negative relationship between the amount of non-audit services purchased from the company's auditor and the company's bond rating. The results of this study support that contention.

The third study investigates the effects of client importance and audit firm size on juror evaluations of auditor liability and damage awards. Previous research in accounting shows that client importance can affect sophisticated financial statement users' perceptions of auditor independence. However, no study has investigated perceptions of auditor independence in a litigation context. The results indicate that

when an auditor is involved in litigation associated with an audit client that is financially more important to the auditor, jurors' evaluations of negligence are higher and they assess more in punitive damages. No effect of audit firm size on negligence ratings or damage awards is found.

DEDICATION

This dissertation is dedicated to my family. First to my wife, Stacey, who provided me with constant love and support throughout my doctoral studies. Second, to my parents, Jeanne and William, and my sister Jessica. Thank you for everything. I love each of you very much.

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TABLE OF CONTENTS

Chapter 1 Introduction	1
References.....	5
Chapter 2 The Effects of Cognitive Moral Development and Client Risk Factors on Students' Ethical Judgments	7
Introduction.....	7
Moral Reasoning and Ethics Education in Accounting.....	10
The Influence of Moral Reasoning on Ethical Judgments.....	12
The Effects of Client Risk on Ethical Judgments.....	15
<i>Increased Moral Intensity</i>	15
<i>Improved Cognitive Processing</i>	17
<i>Client Risk as a Moderator of Moral Development</i>	18
Methodology.....	21
<i>Participants</i>	21
<i>Experimental Instrument</i>	21
<i>Variables</i>	22
Results.....	23
<i>Preliminary Analysis</i>	23
<i>Tests of Hypotheses</i>	24
<i>Exploratory Test of Research Questions</i>	26
Discussion.....	26
References.....	31
Figures and Tables.....	37
Chapter 3 Non-Audit Fees, Auditor Independence, and Bond Ratings	44
Introduction.....	44
Background.....	47
<i>Non-Audit Service Fees and Auditor Independence</i>	47
<i>Importance of Bond Ratings</i>	50
Hypotheses Development	52
Research Method	55

<i>Model Specification</i>	55
<i>Sample Development</i>	57
Empirical Results.....	58
<i>Primary Results</i>	58
<i>Additional Analyses</i>	60
Summary and Conclusions	63
References.....	65
Tables.....	70
Chapter 4 Client Importance, Audit Firm Size, and Juror Evaluations of Auditor Liability.....	76
Introduction.....	76
Background.....	78
<i>Jurors' Attribution of Blame and Assessment of Damages</i>	78
<i>Perceptions of Client Importance</i>	80
<i>Firm Size</i>	82
Method.....	86
<i>Materials and Procedure</i>	86
<i>Participants</i>	87
<i>Design</i>	88
<i>Dependent Measures</i>	88
Results.....	89
<i>Preliminary Analyses</i>	89
<i>Tests of Hypotheses</i>	90
<i>Analysis of Compensatory Damage Awards</i>	92
Discussion.....	92
References.....	95
Tables.....	100
Chapter 5 Summary, Conclusions, and Suggestions For Future Research	104
Summary and Conclusions	104
Suggestions for Future Research	107
References.....	109

Appendices	110
Appendix A – Case Materials used in Chapter 2.....	110
Appendix B – Case Materials used in Chapter 4.....	114
Vita	131

LIST OF FIGURES

Figure 2-1: Jones' Model.....	37
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LIST OF TABLES

Table 2-1: Kohlberg's Six Stage Model of Moral Reasoning	38
Table 2-2: Participant Descriptive Statistics.....	39
Table 2-3: Sample Means and Standard Deviations by Independent Variables.....	40
Table 2-4: Results of Multivariate Analysis of Variance (MANOVA) ^a	41
Table 2-5: Results of Analysis of Variance (ANOVA) for <i>Participant's Ethical Judgment</i>	42
Table 2-6: Results of Analysis of Variance (ANOVA) for <i>Behavioral Intentions</i>	43
Table 3-1: Descriptive Statistics and Variable Definitions	70
Table 3-2: Pearson and Spearman Correlation Coefficients.....	72
Table 3-3: Bond Rating Model Logistic Regression Results	73
Table 3-4 Fee Ratio Median Split Sample Bond Rating Model Logistic Regression Results.....	74
Table 3-5: Non-Audit Fee Median Split Sample Bond Rating Model Logistic Regression Results.....	75
Table 4-1: Demographic Data for Participants.....	100
Table 4-2: The Effects of Client Importance and Audit Firm Size on Juror's Liability Assessments.....	101
Table 4-3: The Effects of Client Importance and Audit Firm Size on Juror's Punitive Damage Awards.....	102
Table 4-4: The Effects of Client Importance and Audit Firm Size on Juror's Compensatory Damage Awards	103

CHAPTER 1 INTRODUCTION

“... [T]he independence of auditors, both in appearance and in fact, is crucial to the credibility of financial reporting and, in turn, the capital formation process.”

(Schuetze 1994)

The auditor's report adds value to financial statements through the independent verification it provides (Johnstone et al. 2001). In fact, it has been argued by some that the profession's very existence depends on the ability of auditors to provide an *objective* opinion (Mednick and Previts 1987). Regulators recognize this and require auditors, through generally accepted auditing standards, to be independent in mental attitude in matters relating to the audit. To achieve this end, regulators stress the importance of auditor independence in fact (i.e. actual independence in mental attitude) as well as in appearance. For example, the Securities and Exchange Commission takes a two pronged approach in evaluating an impairment of an auditor's independence. This includes (1) whether there is direct evidence suggesting a lack of independence in mental attitude, or (2) if a reasonable investor would conclude the auditor is not capable of performing the audit objectively (SEC 2000).

Despite its importance, no formal theory of auditor independence currently exists. However, auditor independence can be understood by its relation to audit quality. DeAngelo (1981) defines audit quality as the market-assessed joint probability of an auditor discovering a breach in the accounting system (i.e. competence) and withstanding client pressure and reporting the breach (i.e. objectivity). Independence speaks to the latter. The implication of this conception of audit quality is that even if an auditor is competent to discover a breach in the accounting system, if the auditor lacks the ability to maintain independence and report the breach, the quality of the audit is compromised (Watts and Zimmerman 1986).

Recent corporate scandals and presumed audit failures have thrust auditor independence, and consequently, audit quality, into the forefront. While there are numerous situations suspected of impairing auditor independence (e.g. client importance, provision of consulting services, auditor tenure), most recent focus has been on the provision of services other than the financial statement audit to audit clients (non-audit services) and the resulting potential for economic dependence on particular clients. For example, a *Wall Street Journal* article published shortly after the Enron bankruptcy specifically instructs investors to “consult the consulting fees” paid to accounting firms and to ask themselves how independent an accounting firm can be if such fees are significant (Bryan-Low and Opdyke, 2002). When independence is impaired, owners and creditors are expected to impose a cost of capital premium on auditees for information risk resulting from lower quality audits (Johnstone et al. 2001). Further, the individual auditor faces consequences associated with impaired independence including loss of reputation and regulatory enforcement (Johnstone et al. 2001).

Most independence research investigates how various factors affect user perceptions of auditor independence (e.g. Bartlett 1993, Beattie et al. 1999, Firth 1980, Gul 1991, Pany and Reckers 1980, Teoh and Lim 1996) as well as on subsequent decisions based on the audited financial statements (e.g. Church and Zhang 2002, Lowe and Pany 1995, 1996, Flaming 2002, McKinley et al. 1995). The general finding in such research is that non-audit services and economic dependence are consistent factors

affecting auditor independence perceptions. Further, in some instances, impaired auditor independence perceptions can affect user decisions based on the financial statements, such as investment and loan decisions (Lowe et al. 1995, 1996, Flaming 2002). Some recent empirical markets based research provides limited support for this finding (Frankel et al. 2002, Hackenbrack and Elms 2002); however, others do not (Ashbaugh et al. 2002).

This dissertation utilizes three studies to further explore issues surrounding auditor independence. The first study draws from previous research in psychology and accounting to investigate factors that may affect auditing students' (i.e. those about to enter the profession) decisions in an independence dilemma. Specifically, the study investigates whether the students' moral reasoning and client risk affects their evaluations of an audit partner's decision to acquiesce to client pressure. The results indicate that both factors individually, and independently, help to explain student evaluations and intentions.

The second study uses a capital markets methodology to investigate whether the provision of non-audit services affects the assigned bond rating of new bond issues. While previous research indicates that perceptions of auditor independence are affected by the provision of non-audit services, relatively little work has been done investigating the effects on user decisions. Specifically this study uses non-audit and audit fee data collected from proxy statements to construct observable proxies for auditor independence. These proxies are added to a benchmark bond rating model to investigate their impact on newly issued bond ratings. The results indicate that there is a consistent negative effect of both the absolute and relative amounts of non-audit services on bond ratings. These results are interpreted as supporting the contention that perceptions of auditor independence are negatively affected by the provision of non-audit services, and bond raters incorporate such perceptions in the bond rating process.

The third study investigates the effects of client importance, a factor identified in previous research as being associated with impairment of sophisticated financial

statement users' perceptions of auditor independence, and audit firm size on juror evaluations of auditors. Previous research has not investigated the effects of factors associated with auditor independence in a litigation context. The study draws from previous research in accounting as well as psychology and law to develop expectations. The results indicate that when an auditor is involved in litigation associated with an audit client that is financially more important to the auditor, jurors' evaluations of negligence are higher and they assess more in punitive damages. No effect was found for audit firm size on liability judgments or damage awards.

The remainder of this dissertation is organized as follows. Chapters two through four present each of the three studies. Each chapter includes an introduction, a review of the relevant prior literature, a description of the research methodology, results, and a discussion. Chapter five concludes the dissertation. The case materials used in Chapter two and Chapter four are presented in Appendix A and Appendix B, respectively.

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CHAPTER 2

THE EFFECTS OF COGNITIVE MORAL DEVELOPMENT AND CLIENT RISK FACTORS ON STUDENTS' ETHICAL JUDGMENTS

Introduction

As accounting irregularities continue to appear in the daily news, the business and popular presses question the ethical values of a profession that has historically marketed its trustworthiness and integrity. Unfortunately for financial statement auditors, ethical dilemmas are inherent in the profession resulting from a struggle to serve two “masters,” the client and the public (Westra 1986). A recent article in the *Wall Street Journal* entitled “How to Predict the Next Fiasco in Accounting and Bail Early” gives seemingly straightforward advice to investors and implies that certain financial indicators are too obvious to be overlooked, especially by a company’s own accounting firm (Bryan-Low and Opdyke 2002). Also implied is that auditors may be *choosing* to ignore such alarms.

Highly publicized audit failures over the past several decades have heightened academic interest in the ethical quality of auditors’ judgments and behaviors. A steady stream of research on ethical judgments in accounting has evolved. Studies drawing on research in psychology, philosophy, and sociology have investigated the ethical quality

of various types of auditor judgments (Ponemon and Gabhart 1990; Ponemon 1993b; Shaub et al. 1993; Kite et al. 1996), the ethical socialization within accounting firms (Ponemon 1992), and differences in ethical behavior across different accountant groups (St. Pierre et al. 1990; Jeffrey 1993; Shaub 1994; Cohen et al. 1995, 2001; Clikeman and Henning 2000). More often than not, studies have found accountants' capacity for ethical decision-making to be lower than that of the general population with similar educational backgrounds (e.g. Armstrong 1987; Ponemon and Glazer 1990; St. Pierre et al. 1990; Lampe and Finn 1992; Shaub 1994; Eynon et al. 1997; Fisher and Sweeney 1998). Consequently, researchers have focused on the relationship between ethics education and ethical judgments.

Studies concerning ethics education in accounting have primarily focused on measuring students' capacity for ethical decision-making, or their cognitive moral development (Kohlberg 1969).¹ In short, higher levels of moral development (also called moral reasoning) should result in more ethical judgments. Researchers have sought to find students' current levels of moral reasoning (St. Pierre et al. 1990; Jeffrey 1993), whether students actually utilize moral reasoning in judgments (Thorne 2001), and the change in moral reasoning following integration of ethics education into an accounting curriculum (Armstrong 1993; Shaub 1994; Ponemon 1993a; St. Pierre et al. 1990). With respect to the latter, research has provided mixed results on the effectiveness of ethics education in accounting. Some studies have suggested marginal improvements (e.g. Armstrong 1993; Shaub 1994) while others have shown little or no improvements (e.g. Ponemon 1993a; St. Pierre et al. 1990). This study addresses how senior-level auditing students, soon to enter the profession, view a timely ethical dilemma faced by auditors—economic pressure to allow management of earnings. Through such research, educators may identify particular boundaries of professional ethics that need to be reinforced.

¹ Moral development has received the greatest attention because research has shown that it is highly correlated with subsequent ethical decisions (Ponemon 1993b; Bay and Greenberg 2001).

Investigation of a potential moderating influence—client risk—makes this study unique from prior studies on ethical judgment. Theory suggests, and ethics research has shown, that characteristics of moral issues (i.e. moral intensity) can affect all aspects of the ethical decision making process (Jones 1991; Shafer 2002). Jones (1991) argues that as the moral intensity of an issue increases, people are more likely to be aware of a moral dilemma, utilize moral reasoning in their decision-making, establish moral intentions, and behave ethically.

Accounting research into the effects of moral intensity on audit judgment suggests that contextual variables (e.g. risk) may “override” the effects of individual traits such as a value system (Shafer et al. 2001; Jones et al. 2002). Other research has shown that an auditor will act more conservatively and use more complex decision processes when he or she perceives a greater risk or danger for being associated with a client (Mock and Wright 1999; Davidson and Gist 1996; Bell et al. 1994; Biggs et al. 1988). Smith and Kida (1991), in a lengthy review of judgment heuristics and biases, found that conservatism is a powerful heuristic that often overrides other judgment models. We investigate whether auditing students, soon to enter the profession, possess a sufficient sensitivity to the nature of a client to incorporate that perception into their ethical judgments. Furthermore, we investigate whether risk will take precedence and moderate the effects of moral reasoning on their ethical judgments. Thus, while prior research supports the prediction that students with high moral reasoning will make significantly more ethical judgments than students with low moral reasoning, we investigate whether this relationship depends on client risk. Such a finding would be consistent with previous research that suggests contextual variables may override the effects of individual traits and that the combined effects of these factors is important in understanding decision making (Shafer et al. 2001; Ketchand et al. 1999; Douglas et al. 2001).

Moral Reasoning and Ethics Education in Accounting

A commonly used model in the ethical decision making literature is the four component-model developed by Rest (Louwers et al. 1997; Rest et al. 1999). The model suggests that ethical decision making is comprised of (1) recognizing the moral issue, (2) making a moral judgment, (3) establishing moral intent, and (4) carrying out the moral action. Rest emphasizes that the components do not depict a linear sequence, but rather there exists the potential for complicated interactions between the components (Rest 1986). At the heart of making a moral judgment (component 2) is the question of how and why individuals make decisions when faced with an ethical dilemma. One way people make moral judgments is through the use of justice concepts (Rest 1986). James Rest (1979) developed a psychometric instrument called the Defining Issues Test (DIT) that measures moral reasoning based on Kohlberg's (1969) justice based model of cognitive moral development (see Table 2-1). "The DIT is based on the premise that people at different levels of moral development interpret moral dilemmas differently, define the critical issues of the dilemmas differently, and have different intuitions about what is right in a situation" (Kaplan et al. 1997, 45-46). The analysis of the instrument yields the subject's relative level of postconventional reasoning, the highest level, hereafter called the P-Score. The P-Score is considered a reliable and valid measure of cognitive moral development (see Rest 1993).²

² The test-retest reliability of the P-Score is generally in the high .70s or .80s, and the Cronbach's Alpha index of internal consistency is generally in the high .70s (Rest 1993). According to Rest (1993), the DIT has been validated in a number of ways: face validity, criterion group validity, longitudinal validity, convergent-divergent validity, through experimental enhancement studies, through experimental manipulation of test-taking sets, and through studies of internal structure. Furthermore, the P-score has been used extensively in prior accounting research (e.g. Ponemon and Gabhart 1993; Ponemon 1992; Bernardi 1994).

Research of the relationship between ethical judgments and education has centered on the study of moral reasoning. Studies have addressed whether individuals with an accounting education have P-scores similar to the general population (e.g. Armstrong 1987; Ponemon and Glazer 1990; St. Pierre et al. 1990; Lampe and Finn 1992; Shaub 1994; Eynon et al. 1997; Fisher and Sweeney 1998). Overall, accountants have tended to score lower on the DIT than similarly educated individuals. In early research on this topic, Armstrong (1987) suggested that the technical nature of accounting education might diminish the potential for cognitive moral development.

Perhaps as a result of the finding that accountants may have lower moral reasoning abilities, researchers have investigated whether an emphasis on ethics in education, either within or outside the accounting curriculum, improves accountants' moral reasoning. Ponemon (1993a) and Wright et al. (1998) focused exclusively on ethics instruction in accounting and found that students' individual moral reasoning did not improve as a result of ethics instruction in an accounting course. Armstrong (1993), using a similar methodology, found that accounting students' moral reasoning did improve as a result of a complete ethics course in the accounting curriculum, particularly when combined with a second ethics course from outside the accounting curriculum. Other studies have evaluated the influence of ethics courses solely outside the accounting curriculum. Shaub (1994), Eynon et al. (1997), and Sweeney (1995) found that auditors who had at least one ethics course while in college had higher moral reasoning levels than auditors that did not. To the contrary, St. Pierre et al. (1990) found that levels of moral reasoning for accounting students were not influenced by their participation in college ethics courses.

Prior research on the effectiveness of ethics education for improving accountants' moral reasoning is inconclusive and has prompted recent researchers to look beyond the DIT as the indicator of ethical judgments for accounting contexts. Thorne (2001) noted that accounting students do not appear to utilize their full moral reasoning capabilities, as measured by the DIT, to make ethical judgments. She suggests that researchers should identify factors that will prompt accounting students to utilize

their moral capabilities and to study students' judgments for accounting-specific dilemmas. This study investigates the influence a contextual factor specific to an ethical dilemma in accounting—client risk—together with moral reasoning.

The Influence of Moral Reasoning on Ethical Judgments

Research on the moral reasoning of auditors has been aimed at identifying which decisions and behaviors are affected by level of moral reasoning, and how they are affected. For a wide variety of judgments and behaviors, auditors with higher moral reasoning have generally made more ethical decisions and acted in a more ethical manner than those with lower moral development.

Previous research in the auditing domain can be summarized according to the specific audit task or judgment studied. Two studies report similar results on the relationship of moral development and the underreporting of audit time, in one case through auditor actions and in another through auditor perceptions. Ponemon (1992) found that auditors with relatively low moral reasoning, based on a median split on P-Score, underreported time more severely than those with relatively high moral reasoning. A subsequent study investigated auditors' perceptions of underreporting, slacking and premature sign-offs (Ponemon and Gabhart 1993, chapter 5). Auditors in this study were also separated into high and low moral reasoning groups using median P-Score. Auditors with high moral reasoning perceived underreporting, slacking, and premature sign-offs more negatively than auditors with low moral reasoning.

A series of studies by Ponemon and Gabhart examined auditors' sensitivity to a client's integrity and competence.³ They found that auditors' moral reasoning influences their reliance on clients with differing competence and integrity. Specifically, Ponemon (1993b) found that auditors with higher moral development were more sensitive to

³ Sensitivity is the extent to which these characteristics are considered during the decision making process.

competent management with low integrity when assessing the audit risk of a client (i.e. auditors with higher moral development assessed audit risk higher for low-integrity management than auditors with lower moral development). Using the same auditors, Ponemon (1993b) performed a median split on P-Score and found that auditors with high moral reasoning were more sensitive to competent management with low integrity when assessing the likelihood of material accounting errors. Further, Ponemon and Gabhart (1993, chapter 6) found that when evaluating whether a proposed adjustment would be material, auditors with high moral reasoning were more sensitive to both positive and negative information concerning the client and its management (competence and integrity). Specifically, compared to auditors with low moral reasoning, auditors with high moral reasoning assessed the probability of the adjustment being material as higher when given negative information and lower when given positive information. Lastly in this area, Bernardi (1994) utilized a median split on P-Score to form low and high morally developed groups. Then, using logistic regression, he found that audit managers with high moral development detected fraud at a higher rate than managers with low moral development. Further, audit managers with high moral reasoning were sensitive to client integrity and competence. Taken together, these results support the notion that moral reasoning influences auditors' awareness of client management characteristics, such as integrity and competence.

Other research of moral reasoning in accounting has focused on auditors' objectivity and independence (particularly, resistance to pressure by client's management). Arnold and Ponemon (1991) studied the effect of moral reasoning on internal auditors' decisions to disclose sensitive findings. They separated internal auditors according to median P-Score and found that auditors with high moral reasoning were more likely to disclose sensitive audit findings than auditors with low moral reasoning. In a more direct test of independence, Ponemon and Gabhart (1990) applied a median split on P-Score for a sample of partners and managers and found that auditors with low moral reasoning were more likely to violate independence rules than those with high moral reasoning. With a sample of experienced auditors from Hong Kong, Tsui and Gul (1996) found that ethical reasoning moderated the relationship between locus of control and auditors' ability to

resist management pressure. Moral reasoning was a determining factor in an auditor's acquiescence to management only for "externals" (individuals who believe they have no control over what happens to them). Specifically, "external" auditors with high moral reasoning were more resistant than those with low moral reasoning. Windsor and Ashkanasy (1995) used a slightly different methodology to separate auditors according to P-scores, by dividing them into three groups (rather than two using a median split). Their results suggested that auditors with low moral reasoning were the least resistant to the client's economic power. These studies provide support that often, auditors with high moral reasoning are less likely to breach their independence than auditors with low moral reasoning.

In sum, prior research has shown that auditors with high moral development make more ethical choices regarding their work ethics, are more sensitive to client attributes, and are more resistant to client persuasions. Further, in a recent review of the ethics research in accounting, Jones et al. (2002) posit that a positive relationship exists between moral development and ethical sensitivity—the ability to recognize the ethical dilemma in a situation and understand who will be affected by choices (Rest 1994).⁴ Thus, individuals with higher moral development are more aware that a situation entails an ethical dilemma. Based on the preceding research, we predict that in the ethical dilemma of whether to allow aggressive client reporting of revenue, participants with higher moral development will (1) evaluate the acceptance of aggressive client reporting as less ethical than participants with lower moral development and (2) be less likely to allow aggressive client reporting than participants with lower moral development. The former hypothesis is a measure of ethical judgment and the latter of behavioral intentions.

⁴ "Ethical sensitivity", "ethical awareness", and "ethical judgment" have all been used to describe similar judgments in accounting research. For example, Cohen et al. (2001) use ethical awareness and ethical sensitivity interchangeably. Shaffer (2002) uses a similar measure to that of Cohen et al. (2001) and labels it ethical judgment.

- H1a: Participants with higher moral development, as measured by the P-score, will evaluate questionable acts by an auditor as less ethical than participants with lower moral development.
- H1b: Participants with higher moral development, as measured by the P-score, will be less likely to engage in questionable acts than participants with lower moral development.

The Effects of Client Risk on Ethical Judgments

In conjunction with moral reasoning, ethical judgments of behavioral intentions may be influenced by a contextual factor—client risk.⁵ While Rest’s four-component model of decision-making centers on the decision maker, Jones (1991) extends the model to include characteristics of the moral issue (see Figure 2-1). As shown in the figure, moral intensity affects all aspects of the decision making process (Shafer 2002).⁶ Little research has addressed the effects of client risk on ethical judgments. However, prior audit research has shown client risk to be a powerful influence in various scenarios and judgments, and should be considered in the study of ethical judgments. Various consequences of heightened client risk may affect ethical judgments—increased moral intensity, improved cognitive processing, and conservatism.

Increased Moral Intensity

Jones (1991) defines moral intensity as a multidimensional “construct that captures the extent of issue-related moral imperative in a situation” (372). Moral intensity is the sum total of the issue characteristics that make moral issues more salient and vivid, where salience is the degree to which an issue stands out and vividness is the

⁵ We define client risk as inherent and control risks of an audit client (i.e. the uncontrollable portions of audit risk).

⁶ Jones et al. (2002) provide a similar model of accountants’ ethical decision making process.

degree to which the issue evokes emotional interest (Wright et al. 1998). Moral intensity includes the magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect. The first dimension, magnitude of consequences, refers to the sum of the harms (or benefits) resulting from an action. When an action may result in a greater magnitude of consequences moral intensity is greater. Social consensus is the degree of social agreement that a proposed act is evil or good; the greater the social consensus on the issue at hand, the higher the moral intensity of the issue. Probability of effect refers to the likelihood that the act in question will result in harm (consequences). As the probability of the potential harm occurring increases, the moral intensity of the issue increases. Temporal immediacy refers to the length of time between the action and the onset of consequences resulting from the action. As the time between the action and possible consequences increases, moral intensity decreases. Proximity is the sense of nearness the decision maker feels to the potential victims or beneficiaries of the act. Jones argues that people care more about people who are close to them. Thus, if those who stand to lose (or gain) from the action are closer to the decision maker, moral intensity will be higher. Concentration of effect is an inverse function of the number of people affected by an act of a given magnitude. Jones argues that people place great importance on individual justice. So, issues with more concentrated effects resulting from an action will contain higher moral intensity.

Moral intensity has been shown to affect accountants' ethical judgments and intentions (Wright et al. 1998; Shafer et al. 1999, 2001; Ketchand et al. 1999; Shafer 2002). Wright et al. (1998) found that accounting students recognize moral issues when the moral intensity of the issue is greater (specifically, the magnitude of consequences). Shafer et al. (1999) demonstrated that issues of differing moral intensity, where the authors manipulate moral intensity via the dollar amount of a misstatement and the intended use of the financial statements, alters auditors' ethical judgments and behavioral intentions concerning auditor independence. Shafer et al. (2001) also manipulated moral intensity via the dollar amount of a misstatement and the intended use of the financial statements and confirm the findings of Shafer et al. (1999); additionally, they found that personal values have no effect on perceived moral intensity.

They concluded that issue characteristics (i.e. moral intensity) may override the effects of individual traits (such as moral development). With corporate executive CPAs as participants, Shafer (2002) manipulated the quantitative materiality of a fraud scheme and financial risk associated with a company (i.e. moral intensity) and asked the executives to estimate the likelihood they would acquiesce to the fraud scheme. Executives viewed peers and themselves as less likely to acquiesce under increased moral intensity, in terms of the materiality of a fraud. Executives also viewed peers as less likely to acquiesce under increased moral intensity as a result of heightened financial risk, although financial risk did not influence the perception of executives' own behavior.

Improved Cognitive Processing

A number of studies have found auditors exhibiting improved cognitive processing in scenarios of high risk. Research by Maletta (1993) and Maletta and Kida (1993) revealed auditors using more complex cognitive processes, in response to high inherent risk, to evaluate whether to rely on work performed by an internal auditor in a financial statement audit. Particularly, auditors considered the combination of the level of work performed by internal auditors and internal audit objectivity when inherent risk was high, but didn't meaningfully incorporate those two factors into a judgment when inherent risk was low. Another study, in the context of working paper review, found that auditors exhibited higher accuracy for recalling reviewed information for an account with high audit risk than one with low audit risk (Sprinkle and Tubbs 1998). Auditors attended more to the information in the high risk areas than in the low risk areas, such that the former information was arranged more effectively and was more accessible in memory.

The results of prior studies show that heightened risk leads to increased moral intensity and improved cognitive processing. Further, prior research suggests that (1) higher moral intensity leads to more ethical judgments and behavioral intentions and (2) auditors using more complex decision processes make more effective judgments. Based

on these premises, the following hypotheses posit that heightened client risk will cause participants to better attend to and integrate informational cues in an unethical scenario, resulting in an improved judgment regarding the ethical appropriateness of and likelihood of engaging in the act portrayed in the scenario.

- H2a: Participants in a high risk scenario will evaluate questionable acts by an auditor as less ethical than participants in a low risk scenario.
- H2b: Participants in a high risk scenario will be less likely to engage in questionable acts than participants in a low risk scenario.

Client Risk as a Moderator of Moral Development

Client risk may also moderate the influence of cognitive moral development on ethical judgments and behavioral intentions, tempering the main effects predicted by Hypotheses 1a and 1b. Heightened risk has been tied to an auditor's conservatism heuristic. Conservatism is a natural defense against the potentially enormous losses that may result from an auditor's poor judgment (Smith and Kida 1991), and typically coincides with a heightened level of skepticism about an event or client. In a study of analytical review judgments, Mueller and Anderson (2002) found that auditors faced with high inherent and control risk factors considered and retained a greater number of potential explanations for an unusual variance than did auditors in a low risk scenario. Auditors in the high risk scenario were less willing to discount plausible explanations than those in the low risk scenario.

Discovery of conservatism has often been a byproduct of research intended to examine other auditor judgment phenomena. Studies investigating whether auditors' judgments are influenced by a confirmatory search strategy (Kida 1984; Trotman and Sng 1989; Anderson and Kida 1989; Anderson 1988; Butt and Campbell 1989), anchoring (Kinney and Uecker 1982; Tomassini et al. 1982), belief revisions (Ashton and Ashton 1988, 1990), recency (Monroe and Ng 2000), and dilution (Hoffman and

Patton 1997) have discovered conservatism either supplanting or moderating the judgment variable of interest. In particular, a common finding of conservatism is that auditors consistently attend to negative information more so than positive information across various audit scenarios and tasks, despite theoretical predictions to the contrary. The consensus is that negative information signals a dangerous decision-making context to an auditor, who becomes skeptical and makes a conservative judgment.

Risk has eliminated a judgment bias, not only via conservatism, but as a result of more complex cognitive processing. Anderson and Maletta (1999) studied auditors' susceptibility to primacy effects, an information order effect which causes suboptimal decisions, in varying levels of inherent risk. Auditors were prey to primacy effects in likelihood of error and audit planning judgments when inherent risk was low. However, auditors in the high inherent risk condition better integrated information introduced late and avoided primacy effects. This result supports the conclusion of other research (Maletta 1993; Maletta and Kida 1993; Sprinkle and Tubbs 1998) that heightened risk improves cognitive processing.

Jones (1991) makes a similar argument when linking his moral intensity construct to moral development⁷. Moral reasoning is argued to require effort. Jones contends that when stakes are low (i.e. low moral intensity) people are likely to economize on efforts devoted to moral reasoning. However, when the stakes are high, people are more likely to engage in increased effort and are more likely to utilize moral reasoning.

Findings that client risk often moderates the influence of other cognitive activities support two possible, yet conflicting, interaction effects. First, it may be that heightened client risk prompts participants' conservatism heuristic and complex decision

⁷ This argument is further reflected in Jones' (1991) proposition 2, “[i]ssues of high moral intensity will elicit more sophisticated moral reasoning (higher levels of cognitive moral development) than will issues of low moral intensity.”

making. Given such an effect, we would expect all participants, even those with low moral development, to be less tolerable of an unethical action in a high risk situation. In a low risk situation only, would cognitive moral development separate those who are more tolerable of questionable acts (low development) from those who are less tolerable of questionable acts (high development).⁸

Alternatively, if client risk factors increase the moral intensity of the issue, thus increasing participants' utilization of their cognitive moral capacity, we would expect the opposite effect. That is, we would expect differences between participants with higher moral development and lower moral development only when risk is high (i.e. high moral intensity). Given the exploratory nature of the moderating effect of client risk on moral reasoning, no formal hypotheses are stated. However, to investigate the possibility of an interaction we pose the following research questions.

Question 1: Does client risk moderate the effects of moral development on ethical judgments?

Question 2: Does client risk moderate the effects of moral development on behavioral intentions?

⁸ This, of course, depends on the degree to which participants are aware of the ethical component of the issue devoid of the risk manipulation. Consistent with Rest's (1986) model of ethical decision-making, if participants are not aware of the ethical nature of the issue (Component 1) they are not going to utilize moral reasoning in their decision process. This possibility is explored further in the analysis.

Methodology

Participants

To test the hypotheses, a laboratory experiment was conducted with 186 U.S. undergraduate auditing students from two major southeastern universities.⁹ Supplemental demographic information was self-reported by the participants. As shown in Table 2-2, the participant group included both males (50%) and females (50%) approximately twenty-two years of age. Participants had completed an average of 31 accounting course hours or approximately 10 accounting courses and had approximately 2 years of business experience. Participants had also completed an average of 3 ethics course hours or one course. Academic statistics indicate an average GPA of 3.1 and SAT of 1174. There were no significant differences between the two universities in the dependent measures, however the schools differed on several demographic variables (GPA, SAT, Accounting course hours, and ethics course hours). The hypotheses were tested while including university as a factor and the results do not differ from the results reported.

Experimental Instrument

The instrument contains a case adapted from Anderson et al. (1997) representing an ethical dilemma. In the case, a client records a material amount of sales revenue for which the accounts receivable have questionable collectability. The auditor is pressured to accept the interpretation due to the economic importance of the client to the audit firm. The case contains information regarding characteristics of the client's CEO, financial performance, controls, relationship to audit firm (i.e. length of tenure, non-audit services offered), and other miscellaneous facts. These information cues, which include control risk factors, inherent risk factors, client business risk factors, and auditor

⁹ The study began with 204 subjects. Six were eliminated due to invalid consistency checks in DIT scoring. The remaining twelve were eliminated because they scored the median DIT P-score; this was done to avoid arbitrary assignment of these participants to "high" or "low" moral development.

business risk factors, are used to establish the level of risk associated with the audit client.

Following the case, which includes all the information just described, the participant is presented with the action choice (i.e. decision) of the auditor in the case. The participant is then asked to respond to various questions that provide the independent and dependent measures, manipulation check, and participant demographic information. The task is explained further as the variables are described below.

Variables

This study examines the effects of two independent variables, client risk and level of cognitive moral reasoning, on participants' ethical judgments and behavioral intentions. Participants were randomly assigned to either a *high risk* or *low risk* case; thus, allowing a between-subjects manipulation of client risk level. Following the presentation of the case, participants were presented with three questions, one to assess ethical judgments and two to assess the likelihood of engaging in the partner's action. To assess ethical judgments, participants were asked to assess the ethical quality of the partner's decision to accept the client's desired reporting on an eleven-point Likert-type scale anchored "Very Unethical" (-5) and "Very Ethical" (5).¹⁰ To assess the likelihood that participants would engage in the partner's action, they were asked both how likely *they* would be to engage in the partner's action as well as how likely their *peers* would be to engage in the partner's action. Previous research argues that by asking participants what their peers would do, they may be more likely to respond with accurate estimates of their own intentions, due to the social desirability of the action (e.g. Cohen et al. 1995; Shafer 2002). Responses to these two questions were provided on eleven-point

¹⁰ This question has been used in prior research as an overall measure of "ethical awareness" (Cohen et al. 2001).

Likert-type scales anchored with “Not Very Likely” (-5) and “Very Likely” (5).¹¹ These three responses represent the dependent measures, *participant’s ethical judgment*, *participant’s behavioral intentions*, and *perceived behavioral intentions of peers*, used to test the research hypotheses.

After reading the case and responding to the questions, participants completed the Defining Issues Test (DIT), which yields the second and final independent measure, *cognitive moral development*. The DIT, developed by James Rest (1979), is a self-administered questionnaire consisting of six standard hypothetical moral dilemmas with each dilemma followed by twelve statements of issues reflecting the different stages of moral development. Participants read each dilemma, make an action choice and then rank which of the given issues were important in making the decision. The Center for the Study of Ethical Development at the University of Minnesota scores the DIT and provides a P-Score for each participant as a percentage ranging from 0 to 95. Participants are categorized as having either high or low cognitive moral development according to whether they score above or below the median, respectively.¹² This method is consistent with other studies investigating the effects of moral development on decision-making (e.g. Ponemon 1992; Ponemon and Gabhart 1993).

Results

Preliminary Analysis

Before performing tests of hypotheses, participants’ responses to the client risk manipulation were analyzed. Participants were asked to rate the riskiness of the client on an 11-point Likert-type scale with endpoints labeled “Very Low Risk” (0) and “Very High Risk” (10). Participants’ mean perceptions of client risk were 5.90 in the low risk condition and 8.28 in the high risk condition. This difference is statistically significant

¹¹ These questions and formats are similar to questions used in prior research (e.g. Shafer 2002).

¹² The median score for our sample of participants is 30.

($p < .001$), indicating that the client in the *low risk* case was viewed as significantly less risky than the client in the *high risk* case. Thus, the risk manipulation was successful.

Other preliminary analyses were necessary to determine the presence of covariates, or interfering variables. Previous ethics research in accounting has occasionally shown differences between male and female moral development and behavioral intentions (e.g. Radtke 2000; Smith and Rogers 2000; Thorne 2001; Jones et al. 2002). To investigate whether gender should be included as a covariate in the analysis, a one-way ANOVA was used to test the differences in P-Scores, individual behavioral intentions, and peer behavioral intentions, according to gender. The analysis indicated no differences in P-Score due to gender ($p = 0.884$). However, the analysis indicated that behavioral intentions (for both participants and peers) were significantly different for males and females. Specifically, females reported lower likelihoods than males that both they and their peers would engage in the act. To control for the effects of gender, it was included in the analysis as a factor (not tabulated); however, the results do not differ from those reported.

Tests of Hypotheses

The experiment was designed to test for the effects of two independent variables on three dependent measures. A multivariate analysis of variance (MANOVA) is appropriate in this case to control the experiment-wide error rate and also because of the potential high correlations among the dependent variables (Hair et al. 1998).

Furthermore, it is appropriate to verify that the independent variables and interaction term have overall significant effects on the group of dependent measures. A MANOVA was performed with client risk and moral development as the independent variables, and ethical judgment, behavioral intentions of participant, and behavioral intentions of peers as the dependent measures. The results of the test, shown in Table 2-4, indicate a significant overall main effect of moral development ($p = 0.014$) and client risk ($p < 0.001$). However, the overall interaction effect of moral development and client risk was not significant ($p = 0.444$). Following the overall tests of significance, the effects of

the independent variables on each individual dependent measure were evaluated in order to test the hypotheses.

Hypotheses 1a and 1b address the effects of moral development on the dependent measures. Specifically, hypothesis 1a predicts that participants with higher moral development will view an auditor's questionable act (i.e., acceptance of a client's aggressive reporting position) as less ethical than those with lower moral development. A univariate analysis of variance (ANOVA) was performed. The results indicate that moral development has a marginally significant effect on the participants' ethical judgment (Table 2-5, $p = 0.092$).

As shown by the sample means in Table 2-3, participants with higher moral development viewed the questionable act as more unethical than those with lower moral development (-1.65 and -1.14, respectively).

Hypothesis 1b predicts that participants with higher moral development will be less likely to engage in a questionable act (i.e., acceptance of aggressive client reporting) than those with lower moral development. To test the hypothesis, two univariate ANOVAs were performed – one for each measure of behavioral intentions. The first measure of behavioral intentions is whether the participant would engage in the questionable act. The second measure is whether the participant believes his or her peers would engage in the questionable act. The results indicate that moral development significantly affects the participants' own behavioral intentions (Table 2-6, Panel A, $p = 0.043$), but not their perceived peers' intentions (Table 2-6, Panel B, $p = 0.335$). Participants with higher moral development rated themselves as less likely to engage in the act (Table 2-3, -2.02) than participants with lower moral development (Table 2-3, -1.32). Thus, hypothesis 1b is supported.

Hypotheses 2a and 2b examine the effects of client risk on participants' ethical judgments and behavioral intentions. Hypothesis 2a predicts that participants in the high client risk scenario will view the questionable act (i.e. acceptance of aggressive client

reporting) as more unethical than those in the low client risk scenario. The results of a univariate ANOVA indicate that client risk has a significant effect on the participants' ethical judgment (Table 2-5, $p < .001$). As shown in Table 2-3, participants in the high client risk scenario viewed the questionable act as less ethical than those in the low client risk scenario (-2.30 and -0.48, respectively). Hypothesis 2a is supported by these results.

Hypothesis 2b predicts that participants in the high client risk scenario will be less likely to engage in the questionable act than those in the low client risk scenario. Two univariate ANOVAs, one for participants' ratings of themselves and one for their ratings of peers, were performed. The results indicate that client risk has a significant effect on the participants' ratings of their own behavioral intentions (Table 2-6, Panel A, $p < 0.001$). Sample means, shown in Table 2-3, reveal that participants in the high client risk scenario rated themselves as less likely to engage in the act than those in the low client risk scenario (-2.83 and -0.52, respectively). Results also indicated that client risk has a significant effect on participants' ratings of their peers' intended behavior (Table 2-6, Panel B, $p < 0.001$). These results support hypothesis 2b.

Exploratory Test of Research Questions

The purpose of the research questions was to investigate two competing conjectures, each supported by previous literature, about the moderating effects of client risk on the influence of moral development. Because the interaction of client risk and moral development was not significant as an influence on the group of dependent measures in the MANOVA, further analysis of the effects of client risk on each specific dependent measure is inappropriate (see Table 2-4). For our sample, client risk does not moderate the influence of moral development on ethical judgments and behavioral intentions.

Discussion

Giant corporations such as General Electric and Bristol-Myers Squibb have come under scrutiny for varying degrees of earnings management (Harris 2002; Smith and

Lipin 1994). Furthermore, the often-quoted speech of Arthur Levitt on “The Numbers Game” has brought the dilemma of earnings management to the forefront of concern over accounting ethics (Levitt 1998). This type of ethical dilemma provides a realistic context in which to study the ethical judgments of accounting students, as suggested by Thorne (2001).¹³ In this study, senior-level auditing students evaluated an audit partner’s judgment in an ethical dilemma concerning earnings management. The audit partner, aware of the economic importance of the client to his firm, accepts an amount of earnings that is potentially inflated due to management’s questionable estimate of uncollectible accounts receivable. Accounting educators should strive to understand how (and why) students evaluate the ethicality of a timely dilemma such as earnings management. Educators should also understand whether (and why) accounting students are motivated to act in an unethical manner. Only by understanding students’ current ethical judgments can educators effectively address professional ethical issues, such as acquiescence to client pressures, in the curriculum.

Prior research into the influence of cognitive moral reasoning has found that auditors with higher moral reasoning are less likely to breach their independence than auditors with low moral reasoning (Arnold and Ponemon 1991; Ponemon and Gabhart 1990; Windsor and Ashkanasy 1995). However, research has not evaluated accounting students’ judgments of the ethicality of an auditor’s acceptance of earnings management. The first notable result of the study is that all students, regardless of their moral development, rated the partner’s acceptance of earnings management below the midpoint of the ethical quality scale. We interpret this finding as an indication that the students viewed the acceptance of earnings management as unethical. We speculate that this finding may be the result of the recent flood of news regarding independence and earnings management and/or classroom discussion on the topics.

¹³ Shaub (1994) and Arnold (1997) were earlier researchers who suggested using context-specific scenarios for the study of accounting students’ moral development.

Consistent with prior research, cognitive moral development was an indicator of students' ethical judgments. Students with higher moral development rated the acceptance of earnings management as significantly less ethical than students with lower moral development. Students with higher moral development also evaluated themselves as less likely to accept the client's earnings management than students with lower moral development. Regardless of the finding that both groups' mean ethicality judgments were below the scale midpoint ("unethical"), cognitive moral development is a determining factor for ethical judgments. This result suggests that educators should continue to determine how to improve accounting students' moral development or prompt students to utilize their full cognitive moral capability if they are not doing so.

Perhaps of most interest in this study are the effects of client risk. We investigated whether client risk would influence students' ethical judgments and moderate the influence of cognitive moral development described above. Students were sensitive to the level of risk associated with the client in the case. Consistent with Jones' (1991) model of moral intensity, the high risk scenario led to a more morally intense situation than the low risk scenario, although the ethical dilemma was the same. Students in the high risk scenario rated the partner's acceptance of earnings management as significantly less ethical than students in the low risk scenario. Students in the high risk scenario were also less likely to accept earnings management, and viewed their peers as less likely to accept earnings management, than students in the low risk scenario. These results imply that cognitive moral development, a personal attribute, is no more indicative of an accountant's ethical judgment than a contextual factor such as client risk. Thus, from a methodological perspective, contextual factors such as client risk are important variables in the study of accountants' ethical judgments. Further, the results indicate that accounting students clearly recognized the moral imperative in the high risk scenario; however, they were less sensitive to the issue in the low risk scenario. Accounting educators may intervene by assisting students in recognizing ethical issues. Previous research suggests that reviewing cases using the stakeholder framework may increase students' ability to recognize issues of lower moral intensity (Wright et al.

1998). Future research might investigate students' sensitivity to other common contextual factors in the study of ethical judgments.

Finally, we explored whether client risk moderates the influence of cognitive moral development on a student's ethical judgment or behavioral intentions. Prior research supports two competing moderating effects. If high client risk prompts a students' conservatism heuristic and the use of more complex cognitive processing about the dilemma, then the influence of cognitive moral development would only be observed in the low risk scenario. In the high risk scenario, even lower moral development students would rate the ethicality of the partner's action and behavioral intentions lower. Alternatively, Jones' (1991) model suggests that higher moral intensity (i.e., higher client risk) prompts utilization of cognitive moral capacity. Thus, in the high risk scenario, with students utilizing more of their full cognitive moral capability, we would observe differences between those with high and low moral development. However, in the low risk scenario with lower moral intensity, students would not utilize their full cognitive moral development and no differences would be observed. The results showed no moderating effect of client risk on moral development.

We offer several conjectures as to why an interaction was not observed. It may be that, because the conservatism heuristic is a functional heuristic that is tied to an auditor's fear of economic loss, students do not exercise the heuristic. Thus, those with lower moral development would not "catch up to" those with higher moral development in the high risk scenario. Future research could re-evaluate the proposed moderating effect of client risk using auditors as subjects, who may be more likely to use the conservatism heuristic in a high risk scenario. With respect to Jones' (1991) model, the lack of an interaction may be due to the overall high rating of client risk by the students. Although students in the high risk scenario rated the client as significantly more risky than students in the low risk scenario, both groups rated the client above the midpoint on the rating scale. Thus, even the low risk scenario may have been sufficiently morally intense that those students were utilizing their full moral capability. Future research might attempt to vary the client risk level such that the low risk scenario would be

perceived as much lower risk than in this study. The lower risk may then lack the moral intensity sufficient to prompt participants to utilize their moral capacity and thus, reveal a moderating influence of client risk on the effects of moral development.

This research is not without certain limitations. Even when using a realistic ethical dilemma, a laboratory experiment is limited because it abstracts a scenario from the real world. The case information is limited and the experiment forces a participant to make an individual judgment, whereas in the real world, he or she could consult with colleagues.

Overall, this study adds to our understanding of ethical judgments of accounting students. Educators should consider not only moral development as a determinant of ethical behavior, but also contextual factors, such as client risk. An awareness of such contextual factors may aid educators in developing ethics instruction material in the accounting curriculum.

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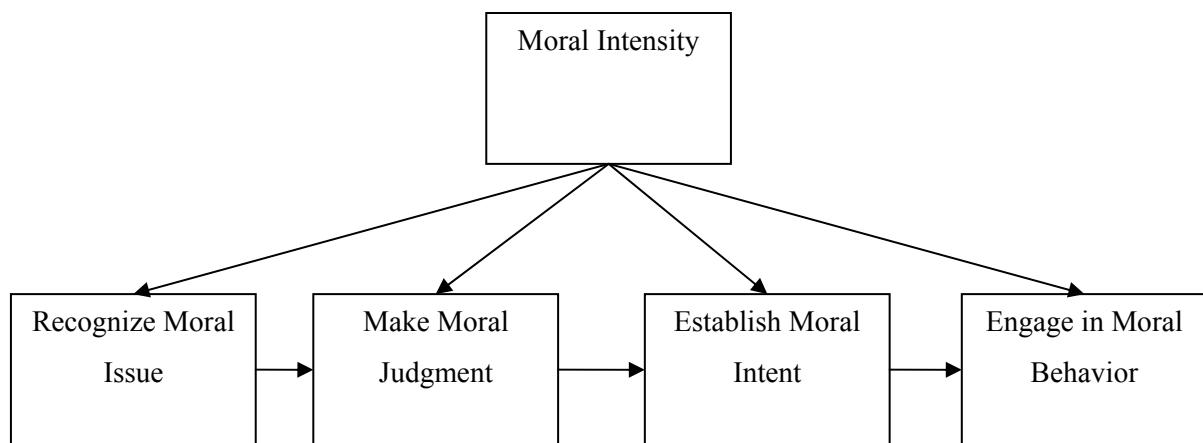
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Figures and Tables

Figure 2-1
Jones' Model



Adopted from Jones (1991)

Table 2-1
Kohlberg's Six Stage Model of Moral Reasoning

<i>Preconventional Level</i>	
Stage 1:	Obedience and Punishment Orientation -- At this stage punishment or harm determines right or wrong.
Stage 2:	Naively Egoistic Orientation -- At this stage one acts to serve one's own immediate interests.
<i>Conventional Level:</i>	
Stage 3:	Good-Boy (or Good-Girl) Orientation -- At this stage one has a need to be a good person in the eyes of others. Good behavior is that which pleases others
Stage 4:	Authority and Social-Order Maintaining Orientation -- At this stage there is an orientation towards authority (fixed rules) and maintaining the social order.
<i>Postconventional Level:</i>	
Stage 5:	Contractual Legalistic Orientation -- At this stage the right action tends to be defined in terms of general individual rights as opposed to what is agreed upon by society.
Stage 6:	Conscience or Principle Orientation -- At this stage one follows self-chosen ethical principles. There is a belief in ideals (justice, equality of human beings, etc.)
<i>Adopted from Kohlberg (1969)</i>	

Table 2-2
Participant Descriptive Statistics

	Count	Mean	Median	S.D.	Minimum	Maximum
GPA ^a	183	3.10	3.00	.45	2.00	4.00
College Hours	178	122.65	120	22.91	81	256
Accounting Course Hours	168	31.26	30	12.43	10	100
Ethics Course Hours	183	2.61	3	2.39	0	15
Years of bus. Experience	178	2.10	1	2.81	0	20
Age	182	22.24	22	2.98	19	44
SAT	119	1174	1170	129.73	810	1540
	Count	Percent				
Gender:						
Male	77	50.0				
Female	77	50.0				
School:						
A	103	55.4				
B	83	44.4				

^a Cases where counts do not equal 186 indicate missing values.

Table 2-3
Sample Means and Standard Deviations by Independent Variables

	Moral Development					
	Low			High		
	Low Risk	High Risk	Total	Low Risk	High Risk	Total
<hr/>						
Is it ethical?	-0.45 (2.15)	-1.91 (1.96)	-1.14 (2.18)	-0.52 (2.53)	-2.65 (1.61)	-1.65 (2.34)
	<hr/> Total - low risk:			-0.48 (2.33)		
	Total - high risk:			-2.30 (1.82)		
Would you do it?	-0.29 (2.62)	-2.48 (2.01)	-1.32 (2.58)	-0.77 (2.57)	-3.14 (1.76)	-2.02 (2.47)
	<hr/> Total - low risk:			-0.52 (2.59)		
	Total - high risk:			-2.83 (1.90)		
Would your peers do it?	0.08 (2.68)	-1.66 (1.92)	-0.74 (2.50)	0.55 (2.33)	-1.84 (2.10)	-0.71 (2.50)
	<hr/> Total - low risk:			0.30 (2.52)		
	Total - high risk:			-1.75 (2.00)		

Table 2-4
Results of Multivariate Analysis of Variance (MANOVA)^a

Factor	F	p-value
Moral Development	3.10	0.014
Client Risk	17.20	<0.001
Moral Development * Client Risk	0.90	0.444

^aAll F-statistics and p-values are based on Wilks' Lambda.

Table 2-5
Results of Analysis of Variance (ANOVA) for *Participant's Ethical Judgment*

Factor	F	p-value
Moral Development	1.79	0.092
Client Risk	34.52	<0.001
Moral Development * Client Risk	1.20	0.274

Table 2-6
Results of Analysis of Variance (ANOVA) for *Behavioral Intentions*

Panel A: Participant's Behavioral Intentions

Factor	F	p-value
Moral Development	3.00	0.043
Client Risk	46.97	<0.001
Moral Development * Client Risk	0.07	0.789

Panel B: Perceived Behavioral Intentions of Peers

Factor	F	p-value
Moral Development	0.18	0.335
Client Risk	37.86	<0.001
Moral Development * Client Risk	0.92	0.340

CHAPTER 3

NON-AUDIT FEES, AUDITOR INDEPENDENCE, AND BOND RATINGS

Introduction

Recent accounting scandals and perceived audit failures have resulted in criticism of the accounting and auditing professions in the financial press for their alleged role in allowing these situations to evolve. Part of this denunciation has been leveled at firms' external auditors by expressing disdain at the presumably substandard work that was completed for their audit clients ostensibly at the expense of the public good. This has spawned an exceptional amount of interest in the accounting and auditing profession with substantial scrutiny being directed upon auditor independence issues.

The Securities and Exchange Commission recently issued Final Rule S7-13-00, *Revision of the Commission's Auditor Independence Requirements* (hereafter RuleS7) which requires disclosure of audit and non-audit fees on all proxy statements issued after February 5, 2001. The SEC argues that such disclosures will "shed light on the independence of public companies' auditors" (SEC 2000).

As a result of these disclosures, concerns have been articulated in the financial press about the magnitude of non-audit fees being paid annually to a firm's external auditors. Non-audit fees encompass all fees not directly charged to the audit including,

systems implementation, systems modification, tax preparation, consultation fees, and internal audit fees. Prior to the newly mandated disclosures of actual non-audit fee data, the SEC estimated that 25% of public companies purchased non-audit services from incumbent auditors (Abbott et al. 2001).¹⁴ However, the SEC-required disclosures revealed that in the year 2000, virtually all public companies (96%) purchased non-audit services from their auditors. Furthermore, these non-audit services typically represented material amounts with 51% of companies paying more for non-audit services than audit services (Abbott et al. 2001). The pervasiveness and extent of these material economic alignments between a firm and its external auditor has led many financial statements users to be concerned about the level of audit quality that actually exists, and correspondingly, to become apprehensive about the auditor's veritable independence.

It is currently an unresolved issue in the extant literature as to whether non-audit services affect auditor independence in *fact* (Ashbaugh et al. 2003, Chung and Kallapur 2001, Defond et al. 2002, Francis and Ke 2002, Frankel et al. 2002, Geiger and Raghunandan 2003, Reynolds et al. 2003). A related, and equally important, issue involves the effects that non-audit services have on the *appearance* of independence. The SEC and the American Institute of Certified Public Accountants (AICPA) have long recognized the importance of these two distinct dimensions of auditor independence (Dopuch et al. 2002). Because independence in fact is typically unobservable, users are forced to rely on subjective perceptions of auditor independence (Lowe and Pany 1996, Lowe et al. 1999). Early research investigating the effects of non-audit services on the appearance of independence has yielded mixed results, however some recent findings suggests that non-audit services may impair user perceptions of independence (e.g. Glezen and Millar 1985, Lowe and Pany 1995, 1996, Jenkins and Krawczyk 2000, Frankel et al. 2002, Hackenbrack and Elms 2002, Raghunandan 2003).

¹⁴ Recent legislation (i.e. the Sarbanes-Oxley Act of 2002) limits the type of non-audit services, but not the actual dollar amount that may be performed by the auditor. The full impact of this legislation on practice will evolve over time. We briefly discuss this issue later in the paper.

In this paper, we empirically explore the effects that non-audit services performed by a firm's external auditors have on perceived auditor independence in the bond market. Bond ratings provide a particularly useful capital market setting in which to examine the effects of non-audit fees paid to external auditors. Information contained in firm financial statements is critical to the fundamental analysis that bond raters undertake when assigning a specific rating to a firm's bond issue. Indeed, bond raters utilize various ratio guidelines based on profitability and leverage measures that are generally necessary for a firm to achieve in order to attain a particular bond rating (Standard & Poor's Corporate Rating Criteria 2002). The bond rating is critically important to the firm, in part, because the difference of a single rating category (e.g. Baa vs. Ba) can often mean a 100 basis point differential in yield. For a 20 year \$400 million bond issue this translates into an \$80 million difference in interest payments. Information providing direct or indirect evidence concerning the underlying credibility of the firm's audited financial statements would be of utmost importance to these bond rating agencies whose very existence depends upon their ability to provide unbiased evaluations of firm default risk.

We utilize several proxies for auditor independence that have been established in the literature (see Defond et al. 2002, Francis and Ke 2002, Frankel et al. 2002, Geiger and Raghunandan 2002) to investigate what effects, if any, that the magnitude and relative degree of non-audit services have on the bond rating process. Our primary results indicate that the level of non-audit services provided by a firm's external auditors is negatively associated with that client's bond rating. Further examination indicates these results are primarily driven by firms that obtain relatively high amounts of non-audit services from their external auditors. Interpreting our non-audit fee measures as proxies for auditor independence, provides an empirical indication of the effects of the magnitude and relative degree of non-audit fees on bond rating analysts' perceptions of auditor independence. These results contribute to the existing literature by empirically demonstrating the effects that relatively high non-audit fees received by a firm's external auditors have on the bond rating process.

The remainder of the paper is organized as follows. Section two establishes the necessary background, contains a review of relevant audit related prior literature, and provides a literature review and some background concerning the bond rating area. Section three describes the hypotheses development. Section four describes the research design and sample selection process. Section five provides the results along with some discussion. The final section summarizes and concludes the paper.

Background

Non-Audit Service Fees and Auditor Independence

RuleS7 defines independence as “a mental state of objectivity and lack of bias” (SEC 2000, Section I). Due to the fact that mental states are, by definition, unobservable, RuleS7 also stresses the importance of independence in *appearance*. RuleS7 states, “Public faith in the reliability of a corporation's financial statements depends upon the public perception of the outside auditor as an independent professional. If investors were to view the auditor as an advocate for the corporate client, the value of the audit function itself might well be lost” (SEC 2000, Section III.A).

Auditor independence, both in fact and appearance, has long been recognized as an important aspect of audit quality (DeAngelo 1981a). Audit quality has been defined in the literature as the perceived ability of an auditor to both discover a breach in the accounting system (i.e. competence), and withstand client pressures to selectively disclose a discovered breach (i.e. objectivity) (DeAngelo 1981a, Watts and Zimmerman 1986). If an auditor lacks independence, this increases the likelihood that they would be perceived as less objective and therefore less likely to report a discovered breach (Lowe and Pany 1995). There are two opposing views on the audit quality implications of audit firms providing non-audit services to audit clients (Simunic 1984, Davis et al. 1993, Frankel et al. 2002). On one hand, the AICPA and the accounting profession have argued that the provision of non-audit services leads to increased knowledge of the client and thus facilitates a higher quality audit (i.e. increases the likelihood of discovering a

breach). Moreover, mitigating factors exist that discourage impairment of independence in fact including corporate governance mechanisms, regulatory oversight, and audit firm policies and culture (Johnstone et al. 2001), as well as market-based incentives, such as loss of reputation and litigation costs (Defond et al. 2002)

The second, more negative view of auditors providing non-audit services to audit clients is that this relationship strengthens the economic bond between the auditor and client, possibly reducing independence, and increasing the possibility that auditors will not report truthfully (Simunic 1984). Some recent evidence suggests that the provision of non-audit services impairs the perception of auditor independence and that investors include this perceived impairment in the pricing of the firm's equity (Frankel et al. 2002, Hackenbrack and Elms 2002).

Previous literature generally supports the contention that equity market participants value audit quality (Franz et al. 1998, Moreland 1995, Teoh and Wong 1993). Until recently however, there has been relatively little empirical research that has examined the implications of auditors providing non-audit services to audit clients. The research that has been completed primarily relies upon auditor fee disclosures from the late 1970's that was required by Accounting Series Release No. 250 (ASR 250): *Disclosure of Relationships with Independent Public Accountants* (SEC 1978). ASR 250 was effective for a limited period from September 30, 1978, until rescinded in 1982. In general, early research conducted based on ASR 250 data does not find that the provision of non-audit services impairs perceptions of auditor independence. Glezen and Millar (1985) compare stockholder approval of auditors before and after ASR 250 disclosures and find no differences in the approval rates. In addition, no significant declines are evident in the quantity of specific non-audit services among CPA firms during the time ASR 250 was in effect (Scheiner 1984). Finally, Antle et al. (1997) prepared a report on auditor independence for the Independence Standards Board (ISB). The authors conclude that there is no support that auditor independence is negatively affected by non-audit services.

A related stream of research investigates whether non-audit fees impair independence in *fact* (Ashbaugh et al 2003, Chung and Kallapur 2001, Defond et al. 2002, Francis and Ke 2002, Frankel et al. 2002, Geiger and Raghunandan 2003, Reynolds et al. 2003). Frankel et al. 2002 find that non-audit fees are positively related to companies beating analysts' forecasts as well as the magnitude of discretionary accruals. However, subsequent research points to weaknesses in Frankel et al. (2002) and fail to replicate their results when using alternative research designs (Ashbaugh et al. 2003, Chung and Kallapur 2001, Francis and Ke 2002, Reynolds et al. 2003). Further, two studies fail to find evidence that non-audit fees impair auditor independence where independence is proxied for by the propensity to issue modified audit opinions (Defond et al. 2002, Geiger and Raghunandan 2003). In general, this research provides very little evidence to suggest that auditors providing non-audit services to audit clients impairs auditor independence.

Despite this early ASR 250-based evidence and recent research into independence in fact, other research suggests that non-audit fees can impair the *perception* of audit independence. For example, several laboratory studies utilizing professional decision makers show that the perception of auditor independence is negatively affected by material business relationships with client companies (e.g. Lowe and Pany 1995, 1996, Swanger and Chewning 2001). Also, several empirical archival studies examine how equity market participants react to the recent disclosure of auditor fees. Frankel et al. (2002) use an event study methodology and find evidence of a negative stock price reaction to the unexpected portion of non-audit fees, but not the level of these fees. The authors are careful to point out that the effect is small in economic terms. Ashbaugh et al. (2003) replicate these results. However, in an attempt to control for other information disclosed in proxy statements, the authors also investigate the difference in abnormal returns on the filing of 2000 versus 1999 proxy statements. They find no evidence that the market reacts to the fee ratio. Raghunandan (2003) takes a different approach and investigates stockholder voting to approve incumbent auditors. His results indicate that voting to ratify the auditor is negatively associated with the level of non-audit services provided. However, as in Frankel et al

(2002), the effect is small which suggests the majority of shareholders do not perceive non-audit services to impair independence. In addition, a recent study using ASR 250 fee disclosures finds a negative association between stock returns and non-audit fees for sample companies with the highest ratio of non-audit fees (Hackenbrack and Elms 2002). Overall, these findings suggest the existence of a negative association between the relative amount of non-audit fees and perceived audit quality; however the effect appears to be small.

While some evidence exists to support the claim that relatively higher non-audit fees can negatively affect equity prices, no empirical evidence has been provided concerning potential debt market effects. Debt markets, specifically bond ratings, are particularly well suited for examining auditor independence issues related to financial statement information because bond rating analysts utilize a great deal of historical financial data and ratios to conduct their fundamental firm analysis to help predict the probability of a particular firm making required payments on time. We extend the existing literature by examining the influence and effects that non-audit fees have on the determination of a firm's bond rating.

Importance of Bond Ratings

Bonds provide a critical mechanism for companies to raise funds to finance new and continuing activities and projects. Corporations raise substantially more capital in the bond market each year than they do in the equity market. For example, in 2001 companies raised \$1,209 billion in the bond market compared to \$262 billion in the equity market (Investment Dealer's Digest 2002). The assigned rating is very important due to the implications it contains regarding the bond issue. The most immediate implication is the implied effect it has on the subsequent yield. As described earlier, the yield spread between major categories can be substantial, easily resulting in a difference of tens of millions of dollars in interest payments over the life of an issue.

In addition to the implications regarding interest yield, there are also many regulatory requirements in the U.S.A. and abroad that are specified in terms of a firm's assigned bond rating. A long list of agencies allow investments to be made only in the top four rating categories (e.g. Aaa, Aa, A, and Baa), typically referred to as "Investment Grade" debt. For example, the Federal Reserve Board and the Federal Home Loan Bank System permit their members to invest in corporate debt only with investment grade ratings. The Department of Labor allows pension funds to invest in securities only in top rating categories. In addition, the New York and Philadelphia Stock Exchanges establish margin requirements for mortgage securities depending on their ratings (S&P Corporate Ratings Criteria 2002). The fact that regulatory agencies define requirements partially based on independent ratings indicates the importance and degree to which the rating process is ingrained in the market system.

There is also substantial empirical evidence in the finance and accounting literature that establishes the importance and information content of bond ratings and changes in bond ratings. Holthausen and Leftwich (1986) present evidence that indicates downgrades in bond ratings are associated with negative abnormal stock returns in a two day window beginning the day of the news release by the rating agency. Glascock et al. (1987) also indicate that equity returns react around bond reratings. Ederington et al. (1987) find that bond ratings provide additional information to the market above and beyond that contained in a set of accounting variables. Hand et al. (1993) examine the bond price and stock price effects of a firm being placed on Standard & Poor's Credit Watch List (often a preliminary step to a rating change), as well as the effects of an actual rating downgrade or upgrade. They conclude that there are both bond and stock price effects associated with all these events. Ziebart and Reiter (1992) find that bond ratings directly affect bond yields. Goh and Ederington (1993) examine the stock price reaction to bond rating downgrades and find that downgrades caused by deterioration in the firm's financial prospects result in a negative stock price reaction while downgrades due to an increase in leverage of the firm result in no stock price reaction. Ederington and Goh (1998) find that analysts' earnings forecast revisions that follow a bond rating downgrade primarily appear to be a reaction to the downgrade itself. Dichev and

Piotroski (2001) examine the equity market effects of rating changes and show that firms that receive upgrades on their bond ratings outperform firms that receive bond rating downgrades by 10 to 14 percent in common stock performance in the year following the bond rating action. Furthermore, they report that current ratings changes predict not only future rating changes, but also changes in the firm's future profitability. These studies show clearly that both the stock and bond markets react in a manner that indicates bond ratings convey important information regarding the value of the firm and its prospects of being able to repay its debt obligations as scheduled.

Hypotheses Development

Although there is substantial research established in the bond rating area, no previously published research has examined the effects of audit quality on industrial bonds. There is one study that suggests audit quality is associated with municipal bond ratings. Allen (1994) uses auditor size (Big 8 vs. Non-Big 8) as a proxy for audit quality and finds accounting information associated with Big 8 audits is able to accurately predict municipal bond ratings.¹⁵ Conversely, accounting information associated with non-Big 8 audits is unable to achieve prediction results better than those expected by random chance. Our objective in this current study is to expand the understanding of perceived audit quality with respect to the bond market by examining the effects that the relative degree and magnitude of non-audit fees have on the actual bond rating assigned by bond rating analysts.

The definition of auditor independence with respect to audit quality applies to all users of financial statements (e.g. DeAngelo 1981b). Without an independent audit a firm is likely to experience an increase in the cost of capital and restricted access to capital (Firth 1997). The consequences of perceived audit quality on financial statement users have been well documented in previous literature (e.g. Teoh and Wong 1993, Allen 1994, Franz et al. 1998). One aspect of perceived audit quality is perceived auditor

¹⁵ See DeAngelo (1981b) for a discussion on auditor size and audit quality.

independence. If financial statement users perceive the provision of non-audit services to impair auditor independence, then they are likely to impose a cost-of-capital premium for information risk associated with their inability to rely on the audit (Johnstone et al. 2001). A cost-of-capital premium suggests a negative association between the provision of non-audit services and bond ratings, given the inverse relationship established between bond ratings and bond yields. As described previously, evidence exists that supports a negative relationship between non-audit services and equity prices (Frankel et al. 2002, Hackenbrack and Elms 2002). However, no study has been completed in the bond market setting.

To investigate the effects of perceived auditor independence on the bond rating of a firm we construct several proxies established in the literature (e.g. Defond et al. 2002, Francis and Ke 2002, Frankel et al. 2002) using RuleS7 disclosures. Specifically, three alternative fee measures are added individually to a benchmark model of bond ratings: (1) the ratio of non-audit fees paid to the incumbent auditor to total fees paid to the auditor (FeeRatio), (2) the amount of total fees scaled by the five-year average of client assets (TotFee), and (3) the amount of non-audit service fees scaled by the five-year average of assets (NonAud).

These fee variables represent observable proxies for auditor independence. The FeeRatio variable is theoretically bounded between zero and some percentage that approaches one. Zero represents no additional non-audit fees received by the firm's external auditor, while higher percentages represent relatively higher non-audit fees received. Because the variable is scaled by total fees paid to the auditor, it does not represent the magnitude of total fees, but rather the relative amount of non-audit services provided by the external auditor. As described earlier, non-audit fees encompass all fees not directly charged to the audit including, systems implementation, systems modification, tax preparation and consultation fees, and internal audit fees. The second fee measure (TotFee) provides a more direct measure of the magnitude of the economic bond shared by the auditor and the client and measures the degree and importance of the total fees paid. Finally, the third measure (NonAud) provides a direct measure of the size

of the non-audit fees and is comprised of only the additional fees paid for non-audit services.

Utilizing these measures we develop three hypotheses. The first hypothesis examines the effects on bond ratings of the ratio of non-audit fees to total fees received by the firm's external auditor. The audit fee data were made available due to the SEC's goal of providing investors information which will allow them to determine "whether the proportion of fees for audit and non-audit services causes them to question the auditor's independence" (SEC 2000, Section III.c.5). This should provide some insight into the effects of the relative distribution of non-audit versus audit fees on bond ratings:

H1: The relative amount of non-audit fees to total fees paid to the firm's external auditor is negatively associated with a firm's bond rating.

The second hypothesis is based on the amount of total fees (i.e. combined audit and non-audit) paid to the external auditor by the firm. While non-audit fees are the focus of regulators, DeAngelo (1981b) argues that nonzero auditor switching costs will result in auditors receiving economic rents for audit services. Following this argument, it is logical that high total fees could lead to a decline in perceived auditor independence. This should provide insight concerning the magnitude of the economic bond that exists between the firm and its auditor, and its influence on the determination of the firm's bond rating.

H2: The amount of total fees paid to the firm's external auditor is negatively associated with a firm's bond rating.

Finally, a third hypothesis is tested to directly examine the effects that the magnitude of non-audit fees has on the firm's bond rating to help provide evidence regarding the perception of auditor independence for the bond rating decision.

H3: The total amount of non-audit fees paid to the firm's external auditor is negatively associated with a firm's bond rating.

Research Method

Model Specification

Modeling of bond ratings has a long history beginning with the seminal work done in the area by Fisher (1959) and extended by various studies (e.g. Horrigan 1966, Pogue and Soldofsky 1969, West 1970, Pinches and Mingo 1973, 1975). Kaplan and Urwitz (1979) continued this stream of research by comprehensively examining alternative prediction models and techniques. One of their conclusions was that statistical techniques that exploit the ordinal nature of bond ratings such as probit or logistic regression are theoretically superior and econometrically more sound than methods that are not designed to accommodate ordinal dependant variables. Subsequent studies have been performed since Kaplan and Urwitz, but none have proven to be clearly superior to their basic model (e.g. Baran et al. 1980, Belkaoui 1980, Ederington 1985, Iskander and Emery 1994).

The Kaplan and Urwitz (1979) model is chosen as the foundation model for our study in light of its robust classification accuracy (66%) and econometrically sound approach. A further advantage of using this model is its parsimony; only five independent variables are required. The required variables are: subordination status of the issue, a measure of firm size, a measure of leverage, a measure of profitability, and a measure of firm risk. Based on evidence provided in Maher (1987) and Graham et al. (2001), we enhance the basic model by including a net pension variable to control for effects of a firm's defined benefit retirement obligations. We also add industry indicator variables to control for any systematic industry rating differences. Finally, we add individually to the benchmark model, the three alternative audit fee measures described previously, i.e., FeeRatio, TotFee, and NonAud.

Each of the three proxies for perceived auditor independence is added individually to the benchmark rating model to determine its significance in the bond rating process. The dependent variable (Rating) is the rating assigned to a firm's debt issue by Moody's Investment Services. The basic estimation model is represented as follows:

$$\begin{aligned} \text{Rating}_j = & \beta_0 + \beta_1 \text{Sub}_j + \beta_2 \text{TotAsset}_j + \beta_3 \text{LtDebt}_j + \beta_4 \text{Income}_j \\ & + \beta_5 \text{NetPen}_j + \beta_6 \text{Beta}_j + \beta_7 \text{Industry}_j + \beta_8 \text{FeeMeasure}_j + \nu_j \end{aligned} \quad (1)$$

We include the following explanatory variables in our logistic regression model: the subordination status of the issue (Sub), log of the firm's total assets (TotAsset), long term debt (LtDebt), the firm's common stock market beta (Beta), and the firm's income from operations (Income). Also included in the model is a variable for the net pension liability (asset) position of the firm (NetPen) represented as the firm's pension obligation minus the fair market value of pension plan assets. Long term debt, operating income, and the net pension liability are all scaled by total assets. The bond ratings are coded such that the highest rated bonds (Aaa) are placed in the highest ordinal category. Thus, we expect the coefficients of TotAsset and Income to be positively associated with Rating, while Sub, LtDebt, NetPen, and Beta are expected to have a negative association with Rating. The variables TotAsset, Income, LtDebt, and NetPen are all five year averages to prevent one year fluctuations from inaccurately portraying the long-term economics of the firms. The generic FeeMeasure variable is used to represent each of our three proxies for auditor independence: FeeRatio, TotFee, and NonAud.

A series of indicator variables are included to control for possible industry effects resulting in seven different 2-digit SIC groups. The estimation model contains six (n-1) industry indicator variables.¹⁶ Industry variables have been utilized in accounting and

¹⁶ The analysis was performed without industry indicators. Results remain unchanged with respect to primary findings.

finance research to control for industry (Bradley et al. 1984 and Graham et al. 2001) and year effects (Collins and Kothari 1989 and Barth et al. 1997).

Sample Development

The dataset development began with all new unsecured corporate bonds issued from February 2001 through April 2002 rated by Moody's. These new issues were matched with several different databases to obtain the variables necessary to estimate the rating equation. Details were collected from Mergent's (formerly Moody's) Bond Record (2002) for all companies listed on the Compustat Industrial Annual database that issued debt over the period (791 new debt issues). Each bond was issued after the proxy filing date to ensure the audit fee information was available at the time of the bond rating process. These debt issues were matched with the audit services fee data collected individually from proxy statements filed by companies with the SEC and made available on EDGAR. This resulted in a dataset of 382 bond issues for Compustat-listed companies that had matching fee data. This dataset was merged with required control data (i.e. total assets, operating income, long term debt, net pension variable, beta) collected from Compustat and CRSP through the Wharton WRDS system. The final dataset included 206 bond issues with complete data for the study.¹⁷

Descriptive statistics regarding the sample are provided in Panel A of Table 3-1 with variable definitions shown in Panel B of Table 3-1. The descriptive statistics show that certain characteristics of our sample are somewhat different from those of Frankel et al. (2002) who used all available proxy statements, and those of Defond et al. (2002) who only used distressed firms. Our sample tends to have higher levels of FeeRatios and higher levels of audit and non-audit fees. This may be due in part to the size of the firms in our sample which contains fewer small firms than other recent samples. Table 3-1 shows that the minimum FeeRatio observation is close to zero (7 % of total fees) while

¹⁷ It should be noted that all the sample firms, except one, are audited by Big Five auditors. The results are unchanged when this observation is removed.

the maximum is 94%. Most firms in our sample purchase substantial non-audit services from their auditor, with a mean (median) of 63% (67%). Consistent with previous research, most sample firms pay more for non-audit services than for the financial statement audits. In fact, over 75 percent of our sample paid more for non-audit services than for audit services as indicated by the first quartile observation of 53%. The actual total fees range from \$200,000 to \$96 million with a mean (median) of just over \$10 (\$5.54) million. Audit fees range from a low of \$90,000 to \$48 million with a mean (median) of \$2.59 (\$1.53) million. Non-audit fees range from \$50,000 to \$77 million and have a mean (median) of \$6.88 (\$2.65) million.

The Pearson and Spearman bivariate correlations, provided in Table 3-2, for the benchmark model variables are relatively low (-.01 to .35), indicating reasonably distinct measures of default risk. FeeRatio is most highly correlated with TotAsset indicating that larger firms in our sample tend to buy a relatively larger percentage of non-audit services from their auditors. TotFee is negatively and significantly correlated with TotAsset which indicates that smaller firms require more audit and non-audit services in relation to their size. Both AudFee and NonAud are also negatively and significantly related to TotAsset which is consistent with TotFee. FeeRatio, TotFee, AudFee, and NonAud are all highly correlated which is logical since they share common components in their development. Overall, nothing is discovered in the descriptive statistics to indicate non-suitability of the sample for the logistic regression analysis.

Empirical Results

Primary Results

The results of the logistic regression analyses for the overall sample are shown in Table 3-3. The first results column displays the benchmark model, while the remaining four columns present models that include the audit fee measures that proxy for auditor independence. All the models in Table 3-3 have a Likelihood Ratio above 215 with p-value less than .0001 indicating a robust job of representing the bond rating process. Of the primary control variables, TotAsset, Sub, LtDebt, and Income are all

significant at the .001 level with proper signs while Beta and NetPen are not significant in the model.

The most notable elements relate to our variables that represent the non-audit fees paid to the firm's external auditors. Model 2 of Table 3-3 includes the FeeRatio variable and addresses hypothesis one (H1). FeeRatio is shown to be statistically significant (chi-square= 10.68, p = .0011) and negatively associated with a firm's bond rating. This provides support for H1 and is consistent with the interpretation that bond rating analysts acknowledge the relative proportion of non-audit fees to total fees that a firm purchases from their external auditors and incorporate this information into the bond rating process as a significant concern. Stated differently, firms that purchase relatively higher levels of non-audit services to audit services from their external auditors, *ceteris paribus*, receive lower bond ratings than firms that purchase relatively few non-audit services.

To test H2, total fees are added individually to the benchmark model. As presented in Model 3 of Table 3-3, the TotFee measure is negative and highly significant (chi-square= 14.72, p = .0001) in the model. This is consistent with bond rating analysts incorporating the total amount of all fees paid to the external auditor as a negative factor when assigning a firm's bond rating. This provides support for H2 and provides some evidence that bond rating analysts evaluate the audit quality and the perceived independence of external auditors that receive substantial amounts of revenue from their audit clients.

To test H3, we add NonAud to the basic model and, for completeness, also include a variable to represent the audit fees paid to the firm (AudFee). This allows us to simultaneously test the importance of both non-audit and audit fees in the bond rating process. Model 4 in Table 3-3 indicates that NonAud is significant (chi-square= 9.20, p = .0024) and negative providing support for H3. The AudFee variable is not significant (chi-square= 1.08, p = .2988). These results suggest that, of total fees paid to external auditors, non-audit service fees alone appears to be the primary driver behind the

significance of the TotFee variable, and thus the most relevant variable to examine regarding concerns about audit quality and perceived auditor independence.

The final model incorporates both the FeeRatio and TotFee measures into the same regression. The rationale for this is that each measure may represent different dimensions of the economic bond that exists between the auditor and client. FeeRatio provides insight into the relative proportion of non-audit services to total services, and, as such, provides a succinct description of one aspect of the nature of the auditor-client relationship, i.e. is it strictly an audit engagement or are substantially more services involved. While useful for this purpose, FeeRatio does not provide a measure of the actual magnitude of the fees. This magnitude or materiality dimension is better represented by the TotFee variable. As indicated in Model 5 of Table 3-3, the results remain consistent with previous models and show both the FeeRatio variable and the TotFee variable to be negatively associated with the bond rating process. Notably, TotFee is shown to be significant at relatively high levels (chi-square= 7.76, p = .0054) while FeeRatio is only moderately significant (chi-square= 3.21, p = .0732). These results are consistent with the explanation that these two measures represent relevant, but somewhat distinct dimensions of the relationship that exists between a firm and its external auditor with respect to the bond rating decision process. We further explore these two variables in the next section.

Additional Analyses

It is possible that the primary results are driven by the sub-segment of our sample with the largest percentage of non-audit services. As described previously, Hackenbrack and Elms (2002) find abnormal returns only for the firms receiving the highest level of non-audit services while Lowe and Pany (1995, 1996) find the perception of auditor independence to be affected in loan decisions only for material relationships. To examine this possibility, we split the sample based on the median FeeRatio measure and re-perform the analyses. Furthermore, we follow a similar process to split the overall sample into two based on the median NonAud measure. The results for the median

FeeRatio split are shown in Table 3-4. Notably, the FeeRatio variable for the above median subsample of firms that purchase relatively higher amounts of non-audit services is significant at the .01 level (chi-square= 6.58) as shown in the first results column of Table 3-4, while the FeeRatio variable for the below median subsample is significant at a lower level (.054, chi-square= 3.70) as shown in the second results column in Table 3-4.

The results for the median split based on the magnitude of non-audit fees (NonAud) are shown in Table 3-5. These results are similar to, but even more pronounced than those for the FeeRatio median split. The measure representing the magnitude of non-audit fees (NonAud) is significantly negative at the .01 level (chi-square= 8.48) for firms that have above median non-audit fees. For those firms with below median non-audit fees, the NonAud variable is not significant at conventional levels (chi-square= 2.39, p = .1215). These results, taken together, provide some empirical evidence supporting a materiality threshold for non-audit services. The fact that firms engage in consulting procurement practices that result in higher non-audit fee ratios with respect to their external auditors is treated as a negative influence on the ultimate bond rating assigned to the firm's debt. This is consistent with the experimental evidence established by Lowe and Pany (1995, 1996) and the results recently described by Hackenbrack and Elms (2002) regarding the equity market, and indicates that relatively high non-audit service fees can have negative effects on a firm's bond rating.

Overall, the results shown in Tables 3-3, 3-4, and 3-5 are substantially consistent with expectations developed based on prior research. Minor departures are the non-significance of two control variables in the models: Beta and NetPen. The use of a firm's common stock market beta initially gained prominence in the 1970's, but has fallen out of significance in more recent accounting and finance literature. Kaplan and Urwitz (1979) found beta to be significant in their sample drawn from the 1970's. However, Graham et al. (2001) and Maher (1996) did not find beta to be consistently associated with bond ratings in more recent samples increasing the probability of a decrease in the importance of a firm's common stock market beta for bond rating decisions.

Prior literature has also been somewhat mixed regarding the importance of the net pension variable with respect to bond ratings. While Graham et al. (2001) and Maher (1996) find the net pension variable to be significant for their samples, Maher (1987) finds the net pension variable to be significant only for that subsample of firms that are in a net liability position. One factor that contributes to our sample results is the continued rise in popularity of defined contribution plans (e.g. 401 k, 403 b plans) to replace traditional defined benefit plans. Another important factor is the considerable stock market gains achieved in the last half of the 1990's that left many defined benefit plans substantially overfunded resulting in a net pension asset position at fiscal year end 2000 and 2001. Further examination of our sample indicates that only 66 out of the 206 observations have a net pension liability providing additional support for an interpretation that is consistent with the results reported in Maher (1987).

The overall results presented here are consistent with the interpretation that the relative percentage of non-audit fees to total fees paid to a firm's external auditors, as well as the total amount of all fees paid to these auditors represent useful proxies for auditor independence that are incorporated in the ultimate determination of the client's bond rating. The analysis also indicates that, of total fees paid to the firm's external auditor, non-audit service fees appear to be the primary consideration. By extension, these results are consistent with the hypothesis that bond rating analysts consistently evaluate the perceived reliability of information displayed in financial statements and that particular measures of non-audit fees represent useful proxies for these perceptions. The fact that firms who purchase less non-audit services receive higher bond ratings, ceteris paribus, is supported by the full sample logistic regression results, and further reinforced when the sample is split based on the median audit fee ratio and the median amount of non-audit fees. These results imply that firms who purchase relatively more non-audit services from their auditor may be penalized with a lower bond rating which is likely to result in higher interest costs for the firm.

Summary and Conclusions

The effects of providing non-audit services to audit clients on the perception of auditor independence and audit quality has been widely debated. The availability of audit and non-audit fee data provides an opportunity to investigate the effects of non-audit services as proxies for the auditor independence aspect of perceived audit quality. Recent evidence indicates that non-audit services may be associated with a reduction in perceived audit quality by investors. Our study provides evidence regarding the effects of providing non-audit services to audit clients on a firm's bond rating. We provide empirical support regarding the systematic incorporation of non-audit fee information into the bond rating process. Our results indicate that both the relative percentage of non-audit fees to total fees, as well as the magnitude of non-audit fees, paid to the external auditors are negatively associated with a firm's bond rating. Further examination indicates that these results are primarily driven by those firms with above median non-audit fees measures. Overall, these results provide evidence suggesting that non-audit fees are incorporated in a consistent manner into a firm's bond rating. Moreover, based on the use of these measures as established proxies for auditor independence, our results provide empirical evidence regarding bond rating analysts' perceptions of audit independence.

Bond ratings provide a particularly useful capital market setting in which to examine the effects of non-audit fees paid to external auditors. When bond rating analysts are preparing to make a prediction of the probability of default risk for a particular firm's bonds, they rely considerably on the information extracted from audited financial statements in order to provide input to the financial ratios that help them perform a fundamental analysis of the firm. Our research complements the research conducted in the equity markets and provides additional insights into the effects of relatively high non-audit fees paid to external auditors on the bond rating process. These findings should be of interest to those parties concerned with the perceived independence of the audit process, as well as those interested in the affects of perceived audit quality on the bond rating process.

Recent legislation (i.e. the Sarbanes-Oxley Act of 2002) has been enacted that relates to external auditors providing additional services to their clients. The act specifically identifies nine non-audit services that may not be performed by incumbent auditors, including; bookkeeping, financial information systems design and implementation (only if it is reasonable to conclude that the results will be subject to audit), appraisal or valuation services, actuarial services, internal audit, management functions or human resources, investment services, legal services, and expert services unrelated to the audit (i.e. advocacy services). In response to such requirements, many firms have eliminated their information technology consulting units (Fisher 2002). However, while the act limits the type of services that may be provided, there are no limits on the amount of fees that may be generated from services that do not meet the specific requirements of the act. Given the evolving legislation and recent changes initiated by the firms, it is likely that the fee structures of the audit firms will change. It will be useful to monitor and examine the effects these changes have on the perception of auditor independence and audit quality. Our results from the bond market, in addition to research conducted in the equity markets, should help provide a point of reference to which future research findings can be compared as the Sarbanes-Oxley Act matures and evolves in practice.

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Tables

Table 3-1
Descriptive Statistics and Variable Definitions

Panel A: Descriptive Statistics (n=206)

Variable		Mean	Std Dev	First Quartile	Median	Third Quartile	Minimum	Maximum
Sub		.11	.31	0	0	0	0	1
Total Assets	^	17,129	30,449	2,730	8,544	18,600	147	277,615
TotAsset		8.92	1.32	7.91	9.05	9.83	4.99	12.53
Long Term Debt	^	4,316	6,476	862	2,668	5,065	79	65,805
LtDebt	*	.32	.15	.21	.30	.40	.04	1.12
Income From Ops	^	551	1,220	70	178	489	-824	7,190
Income	*	.04	.05	.02	.03	.05	-.13	.37
Pension Liability	^	441	1,749	-2	.35	177	-4,045	11,534
NetPen	*	.01	.04	0.00	0.00	.02	-.07	.27
Beta		.97	.58	.52	.94	1.41	.04	2.74
FeeRatio		.63	.19	.53	.67	.75	.07	.94
Total Fees	^	10.59	15.98	2.13	5.54	9.70	.20	96
TotFee	*	.00089	.00074	.00040	.00060	.00123	.00008	.00458
Non-audit Fees	^	8.00	13.28	1.08	2.87	6.87	.05	79
NonAud	*	.00060	.00056	.00002	.00004	.00008	.00000	.00031
Audit Fees	^	2.59	4.05	.71	1.53	2.96	.09	48.00
AudFee	*	.00028	.00029	.00001	.00002	.00003	.00000	.000266

* Scaled (divided) by Total Assets

^ In millions

Table 3-1 - Continued
Descriptive Statistics and Variable Definitions

Panel B: Variable Definitions

Rating	Polychotomous representation of Moody's Bond Rating, Aaa=8, Aa=7, A=6..., Ca=1.
SIC10S-80S	Series of indicator variables to represent 1-digit SIC classification of the issuer.
Sub	Indicator variable set equal to 1 if the bond is subordinated, 0 otherwise.
Total Assets	The 5-year average of a firm's total assets.
TotAsset	Natural log of 5-year average of total assets.
Long Term Debt	The 5-year average of a firm's long term debt.
LtDebt	5-year average of long-term debt scaled by 5-year average of total assets.
Income From Ops	The 5-year average of a firm's income before discontinued items.
Income	5-year average of Operating Income scaled by 5-year average of total assets.
Pension Liability	The 5-year average of a firm's net pension liability. This is calculated by subtracting net pension assets from the pension obligations.
NetPen	5-year average of net pension liability (asset) of a company scaled by the 5-year average of total assets.
Beta	Firm's common stock beta from CRSP database.
FeeRatio	The non-audit fees paid by a firm to its auditor scaled by total fees paid to the auditor.
Total Fees	Total fees paid by a firm to its auditor.
TotFee	Total fees scaled by the 5-year average of assets.
Non-audit Fees	All fees paid to a firm's auditor for services outside the audit.
NonAud	Other fees scaled by the 5-year average of total assets.
Audit Fees	Fees paid to a firm's auditor for the audit of financial statements.
AudFee	Audit fees scaled by the 5-year average of total assets.

Table 3-2
Pearson and Spearman Correlation Coefficients

	Sub	TotAsset	LtDebt	Income	NetPen	Beta	FeeRatio	TotFee	NonAud	AudFee
Sub		-.27***	.05	-.11	-.11	.09	-.32***	-.10	-.15**	.03
TotAsset	-.26***		-.35***	-.09	.20***	-.17**	.35***	-.35***	-.23***	-.45***
LtDebt	.07	-.27***		-.08	-.22***	-.03	-.22***	-.00	-.09	.16**
Income	-.04	-.10	-.30***		.02	-.16**	.10	.11	.16**	-.02
NetPen	-.12*	.27***	-.14**	-.01		-.10	.10	-.06	-.04	-.08
Beta	.08	-.16**	-.13*	-.23***	-.06		-.06	.24***	.22***	.20***
FeeRatio	-.29***	.35***	-.24***	.06	.20***	-.05		.28***	.49***	-.23***
TotFee	-.13*	-.35***	-.18**	.15**	-.18***	.24***	.34***		.95***	.67***
NonAud	-.21***	-.17**	-.22***	.16**	-.09	.15**	.61***	.94***		.49***
AudFee	.05	.65***	-.02	.13*	-.30***	.24***	-.29***	.71***	.51***	

(Pearson correlations on top diagonal, with Spearman correlations on lower diagonal.)

* indicates significance at the 10% level, ** indicates significance at the 5% level, *** indicates significance at the 1% level.

Table 3-3
Bond Rating Model Logistic Regression Results (n=206)

$$\text{Rating}_j = \beta_0 + \beta_1 \text{Sub}_j + \beta_2 \text{TotAsset}_j + \beta_3 \text{LtDebt}_j + \beta_4 \text{Income}_j + \beta_5 \text{NetPen}_j + \beta_6 \text{Beta}_j + \beta_7 \text{Industry}_j + \beta_8 \text{FeeMeasure}_j + \nu_j$$

Variable (expected sign)	Model 1	Model 2	Model 3	Model 4	Model 5
Sub (-)	-2.02 (14.07) [.0002]	-2.43 (18.16) [< .0001]	-2.60 (20.10) [< .0001]	-2.47 (18.86) [< .0001]	-2.70 (21.14) [< .0001]
TotAsset (+)	1.13 (50.71) [< .0001]	1.28 (58.34) [< .0001]	1.01 (38.29) [< .0001]	1.06 (40.13) [< .0001]	1.13 (41.57) [< .0001]
LtDebt (-)	-6.57 (28.43) [< .0001]	-7.25 (32.11) [< .0001]	-7.34 (32.50) [< .0001]	-7.29 (32.20) [< .0001]	-7.60 (33.77) [< .0001]
Income (+)	28.90 (51.26) [< .0001]	32.27 (56.37) [< .0001]	31.66 (56.65) [< .0001]	31.77 (55.44) [< .0001]	33.22 (58.56) [< .0001]
NetPen (-)	-.01 (.00) [.9974]	-.41 (.01) [.9119]	-.82 (.05) [.8262]	-.75 (.04) [.8412]	-0.88 (.05) [.8126]
Beta (-)	.45 (2.32) [.1274]	-.45 (2.23) [.1349]	-.35 (1.34) [.2477]	-.34 (1.25) [.2630]	-.36 (1.44) [.2302]
FeeRatio (-)		-2.97 (10.68) [.0011]			-1.79 (3.21) [.0732]
TotFee (-)			-955.5 (14.72) [.0001]		-754.7 (7.76) [.0054]
NonAud (-)				-803.70 (9.20) [.0024]	
AudFee (?)				-688.00 (1.08) [.2988]	
Model Likelihood Ratio	219.07	230.09	234.77	232.87	238.04
Model P-value	<.0001	<.0001	<.0001	<.0001	<.0001

*Variable Definitions provided in Panel B of Table 3-1.

* All significance levels reflect two-tailed tests.

Results of logistic regressions using bond-rating prediction model with industry indicators (coefficients not shown). Regression coefficients provided with Wald's Chi-Square (in parentheses) and P-values below [in brackets].

Table 3-4
Fee Ratio Median Split Sample Bond Rating Model Logistic Regression Results

$$\text{Rating}_j = \beta_0 + \beta_1 \text{Sub}_j + \beta_2 \text{TotAsset}_j + \beta_3 \text{LtDebt}_j + \beta_4 \text{Income}_j + \beta_5 \text{NetPen}_j + \beta_6 \text{Beta}_j + \beta_7 \text{Industry}_j + \beta_8 \text{FeeRatio}_j + \nu_j$$

Variable (expected sign)	Above Median FeeRatio Sample	Below Median FeeRatio Sample
Sub (-)	-2.39 (3.44) [.0636]	-1.90 (7.88) [.0050]
TotAsset (+)	1.50 (25.39.) [< .0001]	1.37 (32.16) [<.0001]
LtDebt (-)	-9.67 (21.15) [< .0001]	-4.85 (4.84.) [.0278]
Income (+)	36.72 (29.96) [< .0001]	49.99 (26.96) [< .0001]
NetPen (-)	-.74 (.02) [.8938]	-1.50. (.06) [.8090]
Beta (-)	.10 (.04) [.8465]	-.47 (1.29) [.2562]
FeeRatio (-)	-8.40 (6.58) [.0103]	-3.22 (3.70) [.0543]
Model Likelihood Ratio	96.39	142.17
Model P-value	<.0001	<.0001

*Variable Definitions provided in Panel B of Table 3-1.

* All significance levels reflect two-tailed tests.

Results of logistic regressions using bond-rating prediction model with industry indicators (coefficients not shown). Regression coefficients provided with Wald's Chi-Square (in parentheses) and P-values below [in brackets]. N=103 for each model.

Table 3-5
Non-Audit Fee Median Split Sample Bond Rating Model Logistic Regression Results

$$\text{Rating}_j = \beta_0 + \beta_1 \text{Sub}_j + \beta_2 \text{TotAsset}_j + \beta_3 \text{LtDebt}_j + \beta_4 \text{Income}_j + \beta_5 \text{NetPen}_j + \beta_6 \text{Beta}_j + \beta_7 \text{Industry}_j + \beta_8 \text{NonAud}_j + \nu_j$$

Variable (expected sign)	Above Median Non-Audit Fee Sample	Below Median Non-Audit Fee Sample
Sub (-)	.01 (.00) [.99]	-3.07 (15.76) [<.0001]
TotAsset (+)	.94 (8.97) [.0028]	1.67 (29.00) [<.0001]
LtDebt (-)	-10.29 (18.33) [< .0001]	-8.21 (15.68) [< .0001]
Income (+)	43.85 (24.58) [< .0001]	34.43 (27.70) [< .0001]
NetPen (-)	-3.53 (.46) [.4994]	3.80 (.36) [.5497]
Beta (-)	.14 (.08) [.7736]	-.94 (3.75) [.0527]
NonAud (-)	-1593.80 (8.48) [.0036]	-913.10 (2.39) [.1215]
Model Likelihood Ratio	106.93	132.73
Model P-value	<.0001	<.0001

*Variable Definitions provided in Panel B of Table 3-1.

* All significance levels reflect two-tailed tests.

Results of logistic regressions using bond-rating prediction model with industry indicators (coefficients not shown). Regression coefficients provided with Wald's Chi-Square (in parentheses) and P-values below [in brackets]. N=103 for each model.

CHAPTER 4

CLIENT IMPORTANCE, AUDIT FIRM SIZE, AND JUROR EVALUATIONS OF AUDITOR LIABILITY

Introduction

The surge of litigation experienced by the accounting profession over the last 30 years has been cause for concern (Palmrose 1997, Pacini et al. 2000). While some of the profession's woes have been alleviated via a trend towards decreased liability to third parties (see Pacini et al. 2000), recent corporate scandals have spawned calls for reversing this trend. For example, in a statement prepared for a hearing before the U.S. Senate Committee on Banking, Housing, and Urban Affairs, former Senator Howard Metzenbaum called for restoring joint and several liability for accountants (Metzenbaum 2002). These calls for change stem from presumed substandard audits provided by accountants who show "no real willingness to accept the responsibility for maintaining their independence" (Metzenbaum 2002, I A 2.).

Such an environment intensifies the need for deeper understanding of the perceptions of key players in audit litigation (Latham & Linville 1998). One particularly important player is the juror. As Palmrose (1991) points out, relatively few legal disputes involving auditors (about 10%) are tried to verdict. However, as in most civil (and

criminal) disputes, parties make key litigation decisions (e.g. settlement versus trial) based on how they believe a jury will decide (Hans and Vidmar 1986, MacCoun 1993, Palmrose 1991). Surprisingly, given the importance of the juror in the context of audit litigation, very little is known about the effects of factors specific to the accounting profession on jurors' decisions (Bonner 1999). This paper investigates two factors that may affect juror evaluations of auditors; client importance and audit firm size.

Auditor independence is the cornerstone of the accounting profession (e.g. Mednick 1990). Regulators and the profession have noted that auditor independence, in fact and appearance, is necessary to preserve the value of the audit function (Dopuch et al. 2002). Research investigating factors presumed to affect auditor independence (e.g. client importance, providing services other than audits, length of the auditor client relationship) shows that not only are perceptions of independence affected, but decisions based on the financial statements can be affected as well (e.g. Lowe & Pany 1995, 1996, Flaming 2002). The literature indicates the most consistent factor associated with impaired perceptions of independence is the economic importance of the client to the auditor (e.g. Bartlett 1993, Gul 1991, Beattie et al. 1999, Lowe & Pany 1995). Also, some evidence exists suggesting that the importance of the client to the auditor is positively associated with the incidence of auditor litigation (Lys & Watts 1994).

Prior research suggests that lawsuits against auditors are motivated by auditors' ability to pay (Lennox 1999). In a study of litigation outcomes, Lowe et al. (2002) observe that mock jurors award higher *compensatory* damage awards to plaintiffs involved in a lawsuit with a large international audit firm compared to a relatively small auditing firm. The authors conclude that their results indicate a "deep pockets" effect, where jurors award higher damages based on the defendant auditor's ability to pay. This finding is cause for concern as legal theory suggests that in awarding compensatory damages, jurors should not consider "extra-legal" factors such as the defendant's ability to pay (Greene et al. 2000). Other research in psychology and the law produces findings inconsistent with the findings of Lowe et al. (2002), and suggests possible reasons for their results (e.g. Bornstein 1994).

Drawing upon previous research in accounting and psychology, this study examines the effects of client importance and audit firm size on juror evaluations of auditor negligence, as well as compensatory and punitive damage awards. While some evidence has shown these factors to be related to the likelihood of litigation (Palmrose 1988, Lys & Watts 1994), little is known about the effects of these factors on litigation outcomes. Potential jurors were asked to provide negligence and damage award judgments following a case wherein an audit firm was sued for failing to warn financial statement users about the client's potential for bankruptcy (i.e. a going concern modification). Jurors rated the audit firm significantly more negligent when the client represented a material amount of audit fees than when the client represented an immaterial amount of fees. Furthermore, the influence of client importance carries over into participants' punitive damage awards, which were higher when the client represented a material amount of audit fees. The size of the audit firm had no influence on either negligence judgments or punitive damage awards. These results suggest that potential jurors do, in fact, consider arguments regarding the economic bond between the auditor and client when evaluating negligence.

Background

Jurors' Attribution of Blame and Assessment of Damages

At the heart of a juror's role is the choice of whether to attribute blame for the plaintiff's losses to the defendant. Both normative and explanatory models of blame attribution recognize the powerful influence of perceived intentions on the attribution of blame (e.g. Shaver 1985, Schlenker et al. 1994, Alicke 2000). Research in psychology provides empirical evidence that perceivers' ascriptions of blame are intensified when they believe that the individual had intentions of acting in a given manner (Hogue and Peebles 1997, Kleinke et al. 1992, Malle and Knobe 1997). For example, both Hogue and Peebles (1997) and Kleinke et al. (1992) find, in criminal settings, that when actors show intent, blame is increased.

Alicke et al. (1990) recognized the difficulty for an observer to know an actor's intentions, which are internal wants and desires. They proposed that intentions can be inferred from observing environmental cues about the *motives* of the individual—motives supply the reasons for the wants and desires. They tested their proposition by omitting the explicit intentions of the individual but provided various cues suggestive of potential motive to act in a certain manner. As predicted, observers associated potential motives with intentions and attributed more blame when the individual had plausible motives to act in the stated manner (Alicke et al. 1990). Other studies also find that negative evaluations follow the inference of negative motives (e.g. Campbell 1999, Ferris et al. 1995). In addition to increased blame, when intent is perceived, people are also likely to increase punishment of the actor (e.g. Hogue and Peebles 1997, Kleinke et al. 1992). For example, Darley and Huff (1990) investigated the effects of intent on damage awards and found that punitive damage awards are higher when an act is described as being intentional rather than accidental.

How observers consider motive and intention, attribute blame, and assess punishment becomes significant to an auditor in a civil litigation scenario. If a lawsuit goes to jury trial, the auditor is the potential object of blame. Furthermore, once blame is established, auditors become the object of damage assessments. The types of damages assessed against auditors in malpractice lawsuits are typical of those found throughout tort and contract law (Shroyer 1991). Damage awards can be either compensatory or punitive in nature (Greene et al. 2001). Compensatory damages are intended to return the injured party to its pre-injury condition. Jurors should therefore consider only the injury suffered by the plaintiff to accomplish this goal (Anderson & MacCoun 1999). Punitive damages, on the other hand, are assessed to punish the defendant and serve as a deterrent to similar future conduct by the defendant or others (Greene et al. 2001). Jurors are instructed to consider characteristics of the defendant (e.g. financial resources) and characteristics of the defendant's misconduct (e.g. egregiousness) when determining what amount would effectively serve the purposes of punishment and deterrence (Anderson and MacCoun 1999, Shroyer 1991).

Perceptions of Client Importance

Over the course of attempting to establish negligent behavior by an auditor, the plaintiff's attorney will likely explain the necessity of auditor independence in terms of the requirements of the professional standards to the jurors. Further, the attorney will also likely present the relationship between the auditor and client, especially if it can be speculated that the relationship impaired the auditor's independence, contributing to the alleged poor judgment of the auditor or in determining the credibility of the auditor as a witness. Such an implication could establish a motive, as perceived by the jurors, for an auditor to act in his/her own interests at the expense of those relying on the audit report. Regardless of whether the risks of litigation and damaged reputation are sufficient forces to keep auditors independent *in fact* (Reynolds and Francis 2001, Defond et al. 2002, Frankel et al. 2002), ultimately, it is perception—not reality—that will determine an auditor's fate in court.

A number of empirical studies in the accounting literature have evaluated the influence of client importance on perceptions of independence (e.g. Bartlett 1993, Firth 1980, Pany and Reckers 1980, Gul 1991, Beattie et al. 1999, Teoh and Lim 1996, Lowe and Pany 1995).¹⁸ Studies have tended to define client importance in terms of fees collected from the client relative to various levels within the firm (e.g. firm or office). Wallman (1996) argues that the appropriate level of study for auditor independence is the decision making unit conducting the audit, which is typically the office level (Reynolds & Francis 2001, Francis et al. 1999).¹⁹ With the exception of Pany and Reckers (1980), studies have generally found that groups other than accountants

¹⁸ Several studies have evaluated the influence of economic dependence *indirectly* through examining firm/office size, based on the notion that a client is likely to be more economically valuable to smaller firms or offices since the overall client base is smaller (Shockley 1981, McKinley et al. 1985, Gul 1989).

¹⁹ The local offices of the firm contract with clients, administer the audit engagements, and issue audit reports signed on the letterhead of the local office of the firm (Francis et al. 1999).

perceive a loss of independence when significant audit fees are generated from the client.^{20,21} Firth (1980) studied the significance of audit fees at the local office level and found that less than thirty percent of the participating financial analysts and loan officers perceived the auditor as independent when a single client provided 20% of office level revenues. A more recent study by Beattie et al. (1999) found that corporate finance directors viewed fees representing 10% of office level revenues as reducing independence. Considering the potential variance in how the materiality of client fees could be operationalized, Gul (1991) chose not to identify a particular proportion of revenues. Rather, he stated to bank loan officers that audit fees were either “significant” or “insignificant” to the local office of the audit firm. Consistent with other studies, bankers perceived that auditors were more likely to subordinate judgments when fees were “significant”.

In general, sophisticated financial statement users’ perceptions of auditor independence are impaired when the client is economically important to the auditor (Firth 1980, Gul 1991, Beattie et al. 1999, Teoh and Lim 1996). Although studies have not evaluated the perceptions of more general (less sophisticated) observers or in the context of litigation, if a juror perceives the importance of a client to the auditor as motive to act in his/her own best interest, then the attribution of blame and punishment will be intensified (Hogue and Peebles 1997, Kleinke et al. 1992, Malle and Knobe 1997, Alicke 1990, Darley and Huff 1990). Thus, jurors may increase ascriptions of auditor liability and assess higher punitive damages against the auditor. Based on the support of prior research in psychology and accounting, the following hypotheses are tested:

²⁰ Pany and Reckers (1980) found that stockholders’ perceptions of independence do not decrease when a local office collects 10% versus 1% of its revenues from a single client.

²¹ Lowe and Pany (1995) also found that material fees collected for an engagement impairs perceived independence, as evaluated by loan officers; however, the fees were associated with a non-audit service (rather than an audit) and thus, is inherently different from studies evaluating the significance of audit fees.

- H1a: For the same auditor judgment, juror evaluations of auditor liability will be higher when the client's fees represent a material proportion of the office's gross revenues than when the client's fees are immaterial.

- H1b: For the same auditor judgment, jurors assess higher punitive damages when the client's fees represent a material proportion of the office's gross revenues than when the client's fees are immaterial.

Lowe et al. (2002) found that juror evaluations of auditor responsibility are positively related to compensatory damage awards. This is consistent with other studies indicating that jurors take liability into account when awarding compensatory damages (e.g. Hans and Ermann 1989, MacCoun 1996). However, other research provides conflicting results (Bornstein and Rajki 1994, Cather et al. 1996, see also Wissler et al. 2001). For example, Bornstein and Rajki (1994) found that while estimates of the degree to which the defendant caused the plaintiff's harm affected liability decisions, it did not affect compensatory damage awards. Because results are inconsistent in the literature, compensatory awards are explored in the analysis, but no specific hypothesis is posited.

Firm Size

Another litigation hurdle for an auditor is often an attribute over which they have no control—the size of their firm. Studies primarily in psychology and law have investigated the effects of defendant identity on liability and damage award judgments (Hans and Ermann 1989, Bornstein 1994, Vidmar 1993, Greene et al. 2000, Greene et al. 2001, Lowe et al. 2002). It is generally held that ability to pay (an attribute of size) should not influence liability judgments or compensatory damages. However, in awarding punitive damages, the consideration of defendant wealth relative to the perceived dollar amount required to punish the defendant is appropriate (Anderson and MacCoun 1999).

The only study of auditor litigation investigating the effects of auditor size on jurors' damage awards found that size does matter. Lowe et al. (2002) utilized a mock juror experiment to investigate whether guilt and/or compensatory damage awards are affected by the size of the defendant audit firm. The audit firm was described as either a large international audit firm or a relatively small auditing firm. Lowe et al. (2002) find no differences in guilt assessments; however, they find that mock jurors award higher compensatory damages to plaintiffs involved in a lawsuit with the larger firm. The authors conclude that, while jurors are able to ignore the auditor's ability to pay, or "deep pockets", in attributing responsibility for the audit failure, they apparently consider this factor in assessing damage awards. They also suggest that additional research investigate how and why this factor influences damage awards in audit litigation.

Previous psychology and legal research provides insight into how jurors may assess damages against audit firms in light of an audit failure. In an early study, Hans and Ermann (1989) find that when the defendant is defined as a corporation as opposed to an individual, mock jurors find the corporation liable for more claims and higher damages, especially non-economic damages (e.g. pain and suffering). However, upon further analysis, they discover no consistent effect of *presumed* financial resources on liability or damage awards. This finding indicates that what appears to be a "deep pockets" effect may be a "corporate identity" effect where identity (i.e. corporation vs. individual) affects juror evaluations and perceived wealth does not.²²

Bornstein (1994) described the defendant in a series of personal injury cases as either a large corporation or a small, independently owned company. The findings indicate that mock jurors find for the plaintiff more often when the defendant was described as a large corporation, however, there is no effect of defendant identity on damage awards. Bornstein (1994) suggests that the differences between his results and

²² The phrase "corporate identity effect" is used by Hans (2000) to describe the tendency of jurors to hold corporations to a higher standard of care than individuals.

that of Hans and Ermann (1989) could be due to the fact that he provided standard jury instructions for awarding compensatory damages while Hans and Ermann (1989) did not. Similarly, Vidmar (1993) provided standard jury instructions and also failed to find an effect of either the identity or number of defendants (e.g. one doctor, two doctors, or a hospital) on compensatory damage awards in both medical malpractice and automobile negligence contexts.

Several recent studies have investigated the effects of defendant wealth on punitive damage awards. Greene et al. (2000) investigated whether defendant wealth, a factor appropriate for punitive damage assessment, would be inappropriately applied in awarding compensatory damages. Consistent with Bornstein (1994) and Vidmar (1993), they find no effect of defendant wealth on compensatory damage awards in a products liability, automobile negligence, or medical malpractice case. However, as would be expected given the function of punitive damages, they do find differences in punitive damages. Robbennolt (2002) obtains similar results.²³

In general this research indicates that businesses are indeed treated differently than individuals in civil liability cases. Further, jurors find large businesses “guilty” more often than small, family-owned businesses and it appears to be due to the standards to which jurors hold large corporations compared to small corporations and individuals. Once guilt is established there appears to be no difference in compensatory damage awards due to the wealth of the defendant. Jurors also appropriately consider defendant wealth when assessing punitive damages.

Lowe et al. (2002) provide no evidence to suggest that juror expectations of large audit firms differs from smaller audit firms. In other words, jurors apparently do not hold firms of different size to different standards, as indicated by the lack of results on responsibility evaluations. This study extends the findings of Lowe et al. (2002) and

²³ Surprisingly, Robbennolt (2002) also finds that *Judges* apparently consider defendant wealth when awarding compensatory damages.

clarifies the role of audit firm size with respect to damage awards. Although Lowe et al. (2002) found that jurors' damage awards were related to the firm's ability to pay, it is not apparent that the study participants were provided with instructions for awarding compensatory damages and may explain why a relationship was found (Greene & Bornstein 2003). This study differs in that mock jurors are provided with standard jury instructions on awarding damages.

Given results in the prior psycho-legal and accounting research, there is no expectation that audit firm size affects juror evaluations of guilt (Lowe et al. 2002). Also, there are no differences due to firm size expected for compensatory damage awards (e.g. Bornstein 1994, Vidmar 1993, Greene et al. 2000, 2001). However, differences in punitive damages are expected (Greene et al. 2000, Robbenolt 2002):

H2: When punitive damages are assessed, jurors will assess higher punitive damages against large audit firms than against small audit firms.

With respect to a potential interaction of client importance and firm size, traditional audit research suggests that larger audit firms may be less susceptible to independence impairment *in fact* because of potential loss of reputation capital (e.g. DeAngelo 1981). Mautz and Sharaf (1961) argue that smaller firms may *in fact* be more dependent on a single client than larger firms because a larger percentage of total firm revenue is contributed by that client. Two issues must be considered, however, in applying this research to the current study. First, perceptions may differ from fact. Further, as discussed above, it is often the local office of the firm (regardless of firm size) responsible for the audit (Wallman 1996, Reynolds & Francis 2001, Francis et al. 1999). Gul (1991) best illustrates the dynamics of firm size and client importance. He manipulated the size of the audit firm and the importance of the client to the *local office* of the firm to investigate the effects on perceptions of independence. While both variables resulted in significant main effects, they did not interact, suggesting that the effects of these variables are independent of each other. There is no basis to expect an interaction between the audit firm size and client importance variables.

Method

Materials and Procedure

Participants were provided with a realistic audit litigation scenario along with jury instructions for assessing negligence, compensatory and punitive damages. The litigation scenario for this study is similar to that used in Lowe & Reckers (1994) which has also been used in more recent research (Clarkson et al. 2002).²⁴ The case describes an electronic toy manufacturer with declining financial performance that subsequently files for bankruptcy. Subsequent to an audit, where the toy company received a standard report containing an unqualified opinion, the toy company filed for bankruptcy shortly after receiving a loan from a bank. The case describes a lawsuit brought by the bank against the auditor for incorrectly providing a favorable audit report.

This case was chosen for two reasons. First, considerable effort was made to ensure the case was understandable to potential jurors (see Lowe & Reckers 1994). Second, the issues described are particularly appropriate given the finding in previous auditor litigation research that actions are more likely to be taken against auditors in the presence of client bankruptcy (Palmrose 1987).

The case was pilot tested to ensure that it was understandable, could be completed in a reasonable time, and the manipulations were successful. Based on pilot testing, minor changes were made to the case. The case and jury instructions were reviewed by an attorney who specializes in auditor litigation both before and after pilot testing. His comments were incorporated into the case materials.

The case materials were separated into two parts and were administered in a controlled setting by one of the authors. First, participants read the audit litigation scenario, rendered verdicts, and assessed awards, if appropriate. After completing the

²⁴ Permission to adapt the case was provided by D. Jordan Lowe.

litigation scenario, participants completed a post experimental questionnaire without access to the litigation scenario to prevent them from referencing or changing earlier verdict and award responses. The questionnaire elicited demographic information as well as manipulation checks.

Participants

Undergraduate student participants were recruited from economics and introductory business courses. College undergraduates are deemed appropriate given that a great deal of research has found very little relationship between civil juror demographic characteristics and juror decisions (Bornstein 1999, Hans and Vidmar 1986). In a pair of studies directly investigating this issue, Bornstein and Rajki (1994) and Zickafoose and Bornstein (1999) found no difference between student and juror verdicts in simulated product liability and medical malpractice trials.²⁵ In a recent analysis of extant jury simulation research, Bornstein (1999) specifically addressed the use of students and found that the “overwhelming majority of studies that have directly compared different mock juror samples have failed to find consistent differences” (pg. 80). In an accounting study, Kadous (2001) obtained mock jurors from different populations (e.g. jury list, phone book, students) and reported no differences in her results when group was considered.

A total of 284 surveys were collected. Of these, 187 usable responses were obtained. Eighteen surveys were removed because of incomplete information provided by the participant. Another 79 (28%) participants failed to correctly respond to a recall question regarding a primary facet of the case and were removed.²⁶ On average, participants in the study were 21 years old with ages ranging from 18 to 32 years. Approximately sixty-five (thirty-five) percent of the participants were male (female),

²⁵ In both studies, mock jurors were defined as jury-eligible citizens.

²⁶ The purpose of the question was to gauge participants’ attentiveness to the important facts of the case.

and ninety-seven percent were unmarried. Participants had taken approximately one accounting course and four business courses at the time of the study. Furthermore, participants had taken approximately one law or political science course at the time of the study. General work experience for the participants ranged from none to ten years, with average work experience of 1.5 years. Approximately forty percent of the participants reported currently owning stock and forty-four percent reported owning stock at some point in time. Each of these demographic variables were analyzed as individual difference covariates; however, none of the variables had a significant influence in the analysis. Demographic statistics are tabulated in Table 4-1.

Design

The experiment utilized a 2 x 2 between-subjects design. The two variables of interest are the importance of the client to the auditor and the size of the audit firm. The size of the audit firm was manipulated using a manipulation similar to that of Lowe et al. (2002). The auditor in the case is described as either “a large international auditing firm with offices in more than 60 cities worldwide; it employs nearly 20,000 professionals” or “a relatively small auditing firm with offices in four cities, with about 230 professionals.”

In manipulating client importance, we considered the suggestions of Wallman (1996) as well as prior research indicating that the level of office revenues provided by the audit client affects auditor independence perceptions. Thus, client importance was manipulated at the office level of the firm. The audit client was described as either “the largest client of the office representing approximately 60% of the office revenues” or “one of the smallest clients of the office representing approximately 2% of the office revenues.”

Dependent Measures

The primary dependent variables are participants’ evaluations of the auditor’s negligence, compensatory damage awards, and punitive damage awards. The case

contains juror instructions for each measure.²⁷ Negligence ratings were elicited by asking for a dichotomous guilt verdict followed by a 7-point confidence-in-verdict question. These questions are combined to create a 14-point liability scale where 1 represents complete confidence in a “not guilty” verdict and 14 represents complete confidence in a “guilty” verdict (MacCoun 1996). This measure was selected because it has been shown to be more predictive of juror voting during deliberation (Stasser & Davis 1981). Participants who find for the plaintiff (i.e. select guilty on the dichotomous verdict question) are asked to award compensatory damages in dollars. Participants are also asked on a dichotomous scale whether punitive damages are warranted, and if so, to provide the dollar amount of punitive damage awards.

Results

Preliminary analyses, which include results of manipulation check questions and general descriptive statistics, are presented below. Results from tests of hypotheses and supplemental analyses follow.

Preliminary Analyses

Successful manipulation of the two experimental factors was checked with questions contained in the second part of the data collection. The client importance manipulation was checked by examining participants’ responses to a question regarding the financial importance of the client to the local office of the audit firm conducting the audit. Participants responded on a 10-point Likert Type scale with endpoints labeled “Not At All Important” and “Extremely Important”. The mean importance rating of 2.73 for the client providing immaterial fees is significantly lower than the mean rating of 8.54 for the client providing material fees to the firm office ($p < 0.001$).²⁸

²⁷ Juror instructions were adapted from Shroyer (1991) and were included in the materials reviewed by the attorney.

²⁸ The firm size manipulation had no affect on the mean importance rating ($p = 0.442$).

The audit firm size manipulation was checked with two questions. The first question asked participants to describe the size of the CPA firm on a 10-point Likert-type scale with endpoints labeled “Not At All Large” and “Extremely Large”. The mean size rating of 7.21 for the large firm is significantly higher than the mean rating of 4.11 for the small firm ($p < 0.001$). The second question asked participants to assess the wealth of the CPA firm on a 10-point Likert-type scale with endpoints labeled “Not At All Wealthy” and “Extremely Wealthy”. The mean wealth rating of 7.48 for the large firm is significantly higher than the mean rating of 5.70 for the small firm ($p < 0.001$). These results indicate that the size manipulation was also successful.

General descriptive statistics indicate that, of the 187 responses obtained, 133 (71.1%) participants found the audit firm guilty of negligence. While not directly comparable to the findings of Lowe and Reckers (1994), this result is consistent with their participants’ views of the auditor’s judgment in the going-concern litigation.²⁹ Specifically, the participants in Lowe and Reckers (1994) rated the judgment of the auditor at 2.97 on an 11-point Likert-type scale with 1 representing “poor judgment” and 11 indicating “very good judgment.”³⁰ In addition, punitive damages were awarded in 32.8% (43) of the cases where participants found for the plaintiff.

Tests of Hypotheses

A 2x2 ANOVA was used to test whether client importance affects jurors’ liability evaluations (H1a). Table 4-2 reports the ANOVA and mean liability ratings on the 14-point liability scale.³¹ Consistent with H1a, liability ratings are significantly lower

²⁹ The litigation case in this study is adapted from the case used by Lowe and Reckers (1994).

³⁰ The mean reported from Lowe and Reckers (1994) is the mean from the “Negative Outcome” group.

³¹ Modeled after MacCoun (1996), the 14-point liability scale combines the dichotomous “Guilty/Not Guilty” measure and the 7-point Likert-type measure for confidence in

when the client is less important to the auditor than when relatively more important ($F = 3.158$, $p = 0.039$, Panel A). Panel B provides the mean liability rating for the less important client (9.18) versus the more important client (10.28). As an additional test, a Chi-Square analysis was performed on participants' dichotomous negligence verdicts (not tabulated). The Chi-Square is significant as well ($p = 0.053$). These results provide support for H1a. Consistent with the findings of Lowe et al. (2002), there is no significant effect found for firm size on liability ratings.

Hypotheses 1b and 2 are related to the influence of client importance and firm size, respectively, on punitive damage awards. A separate 2x2 ANOVA was used to evaluate participants' punitive damage assessments. Note that only those participants assessing punitive damages ($n=43$) were included in this analysis (see Table 4-3, Panel B for cell sizes). As shown in Table 4-3, Panel B, the mean punitive damage awards are in the expected direction for both client importance and audit firm size. That is, mean punitive awards are higher if the client is relatively more important to the auditor or the audit firm is larger. However, Panel A of Table 4-3 shows that the effect of client importance is significant at $p = 0.088$ and the effect of firm size is not statistically significant ($p = 0.191$). Because of the relatively small cell sizes (only 43 participants chose to award punitive damages) as well as the large variance in punitive damage awards, a nonparametric analysis was performed.³² The results of the Mann-Whitney tests are qualitatively similar to the ANOVA results.³³ Together, these results provide some support for H1b and no support for H2.

verdict (from "Not At All Confident" to "Completely Confident"). Thus, 1 represents complete confidence in a "not guilty" verdict and 14 represents complete confidence in a "guilty" verdict.

³² The large variance in punitive awards is consistent with that found in prior studies (Greene et al. 2000, Robbennolt 2002).

³³ The effect of client importance is significant at $p = 0.079$ and the effect of firm size is significant at $p = 0.115$.

Analysis of Compensatory Damage Awards

Lowe et al. (2002) find that audit firm size positively affects jurors' compensatory damage awards. To determine whether compensatory damage awards were influenced by firm size in our study, a 2x2 ANCOVA was performed. ANCOVA was selected to control for participants' liability ratings.³⁴ As seen in Table 4-4, Panel B, the mean compensatory damage award for the small firm (\$1,737,692) is higher than the award for the large firm (\$1,651,471). However, the difference is not statistically significant. This finding is counter to that of Lowe et al. (2002) and suggests that jurors may not award higher compensatory awards when deciding cases involving relatively larger (and wealthier) audit firms. This finding is consistent with a growing body of research in law and psychology casting doubt on the "deep pockets" hypothesis (e.g. Bornstein 1994, Greene et al. 2000, and Vidmar 1993).

Discussion

The litigation environment for public accounting firms is problematic. With recent victories in limiting accountants' liability to third parties being threatened (Metzenbaum 2002), the need for understanding perceptions of key players—particularly the juror—in audit litigation is intensified (Latham & Linville 1998). Very little is known about the effects of factors specific to the accounting profession on jurors' decisions (Bonner 1999). No study has examined the effects of the auditor-client relationship on litigation outcomes. Also, only one study investigates how jurors' evaluations of auditors translate into damage awards (Lowe et al. 2002). This study attempts to extend the findings of Lowe et al. (2002) as well as our understanding of damage awards in an auditor liability setting.

The central finding of this study is that client importance, in terms of financial significance, affects potential jurors' evaluations of auditor liability. If a client was

³⁴ Consistent with the findings of Lowe et al. (2002), the liability rating was a significant covariate.

described as one of the largest of the firm office, participants viewed the auditor more negligent and awarded more punitive damages than when the client was described as one of the smallest. The analysis also suggests that the auditor is found guilty more often when the client is financially significant. This finding builds upon other research in auditor litigation by directly examining the influence of the apparent economic bond between an auditor and client on juror judgments.

The practical significance of this result is that auditors and their attorneys should consider the efficacy of arguments regarding client revenues that will inevitably be presented by plaintiffs' attorneys in litigation, particularly if the revenues are significant to the auditor. When considering whether to pursue a lawsuit in jury trial, one variable that auditors should consider is the financial significance of the client, relative to others of the firm, and how that relationship is likely to be perceived by jurors. This study suggests that it will not be considered favorably. The detrimental influence of a strong financial tie between auditor and client may also carry over into punitive damage awards. However, among potential jurors who rendered a "guilty" verdict, only 43 (or 32% of guilty verdicts and 23% overall) assessed punitive damages against the auditor.

The finding of Lowe et al. (2002) that auditor size (or wealth) affects compensation awards suggests a "deep pockets" bias in juror evaluations. Our study lends two findings that are counter to such a bias. First, punitive damages were not significantly influenced by firm size. Second, while participants rated the large firm in our study significantly larger and wealthier than the small firm, compensatory damage awards were not higher for the large firm. This result should be viewed in light of a growing body of research which casts doubt on the "deep pockets" hypothesis (e.g. Greene et al. 2000).

Like all research projects, this research has limitations. First, the amount of information presented was necessarily limited. While this reduces ecological validity, it is necessary to keep the experimental materials at a reasonable length. Also, the study looks at only one setting wherein an auditor may be found liable—failure to modify for

going concern. It may be that results do not generalize across different auditor judgments. This study also looks at *juror* evaluations. Trials are decided by *juries*. Research investigating the relationship between juror and jury evaluations finds that first ballot votes predict jury verdicts at a high level (Kalven and Zeisel 1966, Sandys & Dillehay 1995). So, in general, the majority verdict favored prior to jury deliberation usually prevails (MacCoun 1993). The findings with respect to damages awarded by jurors versus juries are interesting. Diamond and Casper (1992) find no difference in compensatory damage awards between jurors and juries; however, they do find differences in punitive damages. Punitive damages are found to be higher after deliberation. This post deliberation increase in damage awards has been found in other research as well (Kaplan and Miller 1987, Diamond et al. 1998). Thus, the results of the current study concerning punitive damages should be interpreted with the juror-versus-jury difference in mind.

Given that this is the first study to consider the influence of client importance on potential jurors' decisions, future research might consider whether client importance is meaningful in lawsuits based on grounds other than going concern (such as client fraud, restatement of financial statements, etc.). Future research might also compare the collective verdict of a jury to this and other studies which are based on individual jurors' judgments, particularly with research suggesting that punitive damage awards may rise in deliberation. The supplemental finding of this study, that potential jurors did not assess a higher level of damages against the larger audit firm is counter to the deep pockets hypothesis. Future research might further consider the influence of firm size on damage awards. Finally, future research should further consider the effects of other factors specific to the accounting profession on jurors' evaluations of auditors. Such information could prove beneficial to all parties involved in auditor litigation.

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Tables

Table 4-1

Demographic Data for Participants

Panel A: Continuous Measures

Attribute		Scale	Mean	Std Dev	Min	Max
Age	Years	20.75	2.12	18.0	32.0	
Accounting Courses	Courses	1.26	0.92	0.0	6.0	
Business Courses	Courses	3.80	2.98	0.0	16.0	
Law and Political Science Courses	Courses	1.17	2.99	0.0	30.0	
Work Experience	Years	1.55	2.33	0.0	10.0	

Panel B: Dichotomous Measures

Attribute	Count	Percent
<u>Gender</u>		
Male	122	65.2%
Female	65	34.8%
<u>Marital Status</u>		
Unmarried	182	97.3%
Married	4	2.1%
<u>Previously Owned Stock</u>		
Yes	82	43.9%
No	105	56.1%
<u>Currently Own Stock</u>		
Yes	74	39.6%
No	113	60.4%

Table 4-2
**The Effects of Client Importance and Audit Firm Size on
 Juror's Liability Assessments**

Panel A: ANOVA

Source	Sum of Squares	df	Mean Square	F	Sig.
Model	58.346	3	19.449	1.083	0.358
Firm Size	0.361	1	0.361	0.020	0.887
Client Importance	56.715	1	56.715	3.158	0.039
Size x Importance	1.489	1	1.489	0.083	0.774

Panel B: Mean Liability Judgments

	Client Importance		
	Low	High	Avg.
Small Firm	9.04 (n=45)	10.33 (n=46)	9.69 (n=91)
Large Firm	9.31 (n=45)	10.24 (n=51)	9.80 (n=96)
Avg.	9.18 (n=90)	10.28 (n=97)	9.75 (n=187)

Table 4-3
**The Effects of Client Importance and Audit Firm Size on
 Juror's Punitive Damage Awards**

Panel A: ANOVA

Source	Sum of Squares	df	Mean Square	F	Sig.
Model	1082469476744.19	3	360823158914.73	0.927	0.437
Firm Size	304828896206.53	1	304828896206.53	0.784	0.191
Client Importance	742369254478.39	1	742369254478.39	1.908	0.088
Size x Importance	9045334562.69	1	9045334562.698	0.023	0.880

Panel B: Mean Punitive Damage Awards

	Client Importance		
	Low	High	Avg.
Small Firm	516,667 (n=9)	815,385 (n=13)	693,182 (n=22)
Large Firm	718,750 (n=8)	958,077 (n=13)	866,905 (n=21)
Avg.	611,765 (n=17)	886,731 (n=26)	778,023 (n=43)

Table 4-4

**The Effects of Client Importance and Audit Firm Size on
Juror's Compensatory Damage Awards**

Panel A: ANOVA

<u>Source</u>	<u>Sum of Squares</u>	<u>df</u>	<u>Mean Square</u>	<u>F</u>	<u>Sig.</u>
Model	3815987942496.32	4	953996985624.08	3.285	0.013
Liability	3200218140837.03	1	3200218140837.01	11.020	0.001
Firm Size	518004650499.37	1	518004650499.37	1.784	0.184
Client Importance	50543533585.31	1	50543533585.31	0.174	0.677
Size x Importance	284845254106.46	1	284845254106.46	0.981	0.324

Panel B: Mean Compensatory Damage Awards

<u>Client Importance</u>			
	<u>Low</u>	<u>High</u>	<u>Total</u>
Small Firm	1,810,345 (n=29)	1,679,167 (n=36)	1,737,692 (n=65)
Large Firm	1,610,000 (n=30)	1,684,211 (n=38)	1,651,471 (n=68)
Total	1,708,475 (n=59)	1,681,757 (n=74)	1,693,609 (n=133)

CHAPTER 5

SUMMARY, CONCLUSIONS, AND SUGGESTIONS FOR FUTURE RESEARCH

Summary and Conclusions

This dissertation investigates auditor independence in three ways. The first study investigates factors predicted to be related to auditing students' independence decisions. Specifically the study utilizes an ethics context to examine the effects of students' cognitive moral development and client risk on students' ethical judgments and intentions. The results of the study indicate that both cognitive moral development and client risk are related to the students' ethical judgments and intentions. There are several implications for the independence literature that can be drawn from these results. First, cognitive moral development is shown to be significantly related to students' (1) judgments of how ethical the act of earnings management is, and (2) decisions on whether they would allow it. This suggests that educational attempts to foster the moral development of accountants may be fruitful in assisting future auditors to maintain independence (see Armstrong 1993). It is also shown that client risk, an environmental variable, has a significant effect on independence decisions. This finding suggests that educators should also investigate ways to sensitize students to situations where client risk is lower. Despite expectations, client risk did not interact with participants'

cognitive moral development in affecting judgments. Overall, it is encouraging to see that participants in the study, on average, view earnings management as unethical.

The second and third studies deal with potential consequences associated with the *perceived* impairment of auditor independence. Specifically, the second study investigates how disclosures of the provision of non-audit services to audit clients influence a company's bond rating. Findings indicate that non-audit services have a negative impact on a client company's bond rating. Further analysis shows that there is a consistent negative effect of both the absolute and relative amounts of non-audit services on bond ratings; however this effect may not be economically significant to the company (Raghunandan 2003). While bond analysts perceptions of auditor independence is not directly observable, the results are consistent with the argument that the provision of non-audit services negatively impacts analysts' perception of auditor independence and they consider this in the bond rating process. The current study adds to a growing body of literature showing that user decisions are affected by auditors providing these services (e.g. Raghunandan 2003). This study is unique because it investigates the potential negative effects of non-audit services in a previously unexplored venue, the debt market. This approach helps to both validate and extend previous research in the equity market. While many non-audit services are now either restricted or banned, this information is crucial for policy makers to consider in future matters concerning non-audit services. For example, the Sarbanes-Oxley Act of 2002 grants the Public Company Accounting Oversight Board the power to disallow non-audit services the Board finds incompatible with the audit.

The third study investigates the effects of client importance and audit firm size on juror evaluations of auditor liability and damage awards. This study finds that client importance, a factor identified in previous literature as being associated with perceived impairment of auditor independence, affects jurors' perceptions of auditor negligence and punitive damage assessments in an auditor negligence trial. There is no significant effect found for audit firm size on perceptions of guilt or damage assessments. These findings are consistent with previous research showing that the financial importance of

an audit client to the auditor affects independence perceptions of more sophisticated financial statement users. The primary implication for auditor independence research is that juror perceptions are affected by the apparent economic importance of the client to the auditor. While prior research hints that auditors are more likely to be involved in litigation associated with larger clients, this study suggests litigation outcomes are also affected. Further, prior research has only investigated the perceptions and decisions of sophisticated financial statement users (e.g. financial analysts, loan officers) and ignored those of less sophisticated users (such as a typical juror). Overall, the findings of this study may be particularly useful for parties involved in auditor litigation in making key litigation decisions (e.g. settlement versus trial).

The combined results of these studies are positive for the auditing profession, provided the auditors avoid litigation. Shockley (1981) suggests that because users have no way of knowing the true state of an auditors' independence, they must rely on the auditor's professional integrity and ethics. The results of the first study indicate that, on average, auditing students believe that earnings management is unethical and indicated that they would not accept earnings management attempts by clients. Because auditors are the "gatekeepers" of the capital markets, that auditing students (i.e. those about to enter the profession) view earnings management in this way is promising for financial statement users. The results of the second study indicate that while there is a negative affect of the provision of non-audit services on a client's bond rating, it is not an economically significant effect. This finding, combined with other research in the equity market (e.g. Raghunandan 2003), provides evidence that the majority of users maintain faith in the audit process regardless of the level of non-audit services provided. The results of the third study, however, indicate that jurors find auditors more "guilty" and assess more in punitive damages against them when they are involved in litigation with clients that are more financially important to the auditor. This troubling result indicates a lack of faith exhibited by jurors that auditors have the professional integrity and ethics to maintain their independence from more financially important clients.

Suggestions for Future Research

Study 1 - The Effects of Cognitive Moral Development and Client Risk Factors on Students' Ethical Judgments

Given the results of the first study, future research should explore ways to improve students' moral reasoning skills as well as their ability to recognize ethical dilemmas. The results of this study also emphasize the need for further understanding of the individual and environmental characteristics associated with auditor maintaining their independence. Future research could also extend this study by exploring the combined effects of moral reasoning and moral intensity on experienced auditors' judgments. It would be interesting to explore the interaction between client risk and moral reasoning on a subject pool that is perhaps more likely to exhibit conservatism (Smith and Kida 1991). Future research should also explore these effects in different judgment contexts (e.g. decisions to "book-or-waive" audit adjustments).

Study 2 - Non-Audit Fees, Auditor Independence, and Bond Ratings

One way to extend this study would be to utilize a behavioral methodology to investigate the effects of non-audit services on bond rating analysts' perceptions of auditor independence as well as their credit rating decisions. Given the current interest in auditor independence exhibited in the popular press, it would also be interesting to investigate the effect found in the current study in future time periods. Also, while the data is not available in the United States prior to 2001, the data has been available in the UK for some time. Future research could consider whether the results of this study are similar for UK firms.

Study 3 - Client Importance, Audit Firm Size, and Juror Evaluations of Auditor Liability

An archival study of actual auditor litigation outcomes, where client importance is measured, would be the ideal compliment to the current study. Another particularly fruitful avenue for future research would be to investigate different defenses that may mitigate the effect found in the current study. Future research could also consider other factors that may affect perceived motives in audit litigation. Given that the current study

is only the second to study damage awards in audit litigation; future research should consider other factors likely to affect these awards.

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APPENDICES

Appendix A – Case Materials used in Chapter 2

High Risk Scenario

Bill Kaiman is the CEO of Springdale Industries. He joined the firm 3 years ago. Kaiman has limited experience in the industry. During most of his career Kaiman has focused on marketing endeavors, some of which were of questionable character. In fact, in two instances Kaiman was indicted (but subsequently acquitted) on mail fraud violations. Kaiman's lavish personal lifestyle creates considerable financial demands, met primarily via his compensation from Springdale. There are significant management incentive options available to management.

Springdale's economic performance has not been very stable in recent years, and bond covenants are in threat of violation.

Springdale Industries has been an audit client of the ABC CPA firm for 3 years. ABC's audit staff currently evaluated Springdale's internal controls as being weak to average. Poor operating budgets persist for the internal audit department as well as the accounting department; and neither have been able to attract professionals with strong qualifications.

The ABC partner in charge of the current audit disagrees with the manner in which Bill Kaiman has chosen to record some sales transactions, as the collectability of the related receivables appears questionable. The ABC CPA firm collects considerable fees from management consulting services for Springdale, in addition to the fees for audit services for Springdale.

Action: The ABC partner in charge of the engagement accepts Bill Kaiman's interpretation of the sales revenue.

[Continued on the next page.]

Now please respond to the following questions by circling the appropriate number on each scale. As you respond to each question, please do NOT change your answers to previous questions.

1. The ethical quality of the partner's decision to accept Bill Kaiman's interpretation of the sales revenue is:

Very Unethical -5 -4 -3 -2 -1 0 1 2 3 4 5 Very Ethical

2. How likely would **you** be to accept Bill Kaiman's interpretation of the sales revenue?

Not Very Likely -5 -4 -3 -2 -1 0 1 2 3 4 5 Highly Likely

3. How likely is it that **your peers** would accept Bill Kaiman's interpretation of the sales revenue?

Not Very Likely -5 -4 -3 -2 -1 0 1 2 3 4 5 Highly Likely

4. How would you rate the risk of Springdale Industries as a client, on the following scale?

Low Risk Scenario

Scenario

Bill Kaiman is the CEO of Springdale Industries. He has been with the firm 3 years and is known in the community as an individual of high integrity. He has considerable experience in the industry and he is a past president of the state Chamber of Commerce. Kaiman inherited great wealth and accordingly has no pressing financial needs. Springdale does not provide significant management incentive options to management.

Springdale's economic performance has been relatively stable over recent years, and no bond covenants are in threat of violation.

Springdale Industries has been an audit client of the ABC CPA firm for 3 years. ABC's audit staff currently evaluated Springdale's internal controls as being good to strong. Good operating budgets exist for the internal audit department and the accounting department; both are made up of professionals with strong qualifications.

The ABC partner in charge of the current audit disagrees with the manner in which Bill Kaiman has chosen to record some sales transactions, as the collectability of the related receivables appears questionable. The ABC CPA firm collects considerable fees from management consulting services for Springdale, in addition to the fees for audit services for Springdale.

Action: **The partner in charge of the engagement accepts Bill Kaiman's interpretation of the sales revenue.**

[Continued on the next page.]

Now please respond to the following questions by circling the appropriate number on each scale. As you respond to each question, please do NOT change your answers to previous questions.

5. The ethical quality of the partner's decision to accept Bill Kaiman's interpretation of the sales revenue is:

Very Unethical -5 -4 -3 -2 -1 0 1 2 3 4 5 Very Ethical

6. How likely would **you** be to accept Bill Kaiman's interpretation of the sales revenue?

Not Very Likely -5 -4 -3 -2 -1 0 1 2 3 4 5 Highly Likely

7. How likely is it that **your peers** would accept Bill Kaiman's interpretation of the sales revenue?

Not Very Likely -5 -4 -3 -2 -1 0 1 2 3 4 5 Highly Likely

8. How would you rate the risk of Springdale Industries as a client, on the following scale?

Very Low 0 1 2 3 4 5 6 7 8 9 10 Very High
Risk

Appendix B – Case Materials used in Chapter 4

Cover Page – Same for All Versions

Dear Participant:

Please take a few minutes to read this case and fill out the questionnaire.

A case follows that describes auditors of a Certified Public Accountant (CPA) firm conducting an audit of a company's financial statements. Financial statements are the accepted means by which companies report their income and financial position.

There is no time limit for this task, as you should work at your normal pace. Some individuals may take more or less time than you. Please do not put your name on any of these papers. You will remain completely anonymous.

This exercise consists of two parts. Part I (this document) is the case described above followed by a few questions. After completing the case, you will be asked to place this document back into the white envelope provided to you and then remove Part II from the brown envelope. After completing Part II, you will be asked to place it back into the brown envelope. At this point your task will be completed.

Thank you for your very important assistance.

Case Background – High Client Importance, Large Audit Firm

Atlantis

Atlantis produces electronic toys and sells its toys to national chain stores. The financial position of Atlantis has recently declined and is considered to be slightly below the industry average.

CPA Firm Audit

As a publicly-traded company, Atlantis is required by law to have its financial information audited by an independent auditor. Since the auditor is an independent, unbiased party, the audit should provide a reasonable level of assurance to readers of financial statements that the financial information is fairly stated by management (in accordance with Generally Accepted Accounting Principles).

As part of an audit, an auditor has a duty to determine whether a company will likely continue to exist (in other words, not go bankrupt) for at least another year. The professional standards of auditors require that if an auditor believes there is “substantial doubt” that the company will exist (for at least another year), then the auditor must report this to financial statement users (such as bankers, investors, etc.) in the audit report. If an auditor does not have “substantial doubt” about the company’s ability to exist (for at least another year), and there are no other major problems, then the standard, favorable audit report should be given.

The Audit of Atlantis

The independent auditor for Atlantis is Smith & Watkins, CPAs. Smith & Watkins is a relatively large international auditing firm with offices in more than 60 cities worldwide; it employs nearly 20,000 professionals. Audits of companies are overseen by individual offices within Smith & Watkins, so the local office of Smith & Watkins is responsible for the Atlantis audit. Atlantis is the largest client of the local office, representing approximately 60% of the office’s revenues.

During the 1999 audit, Smith & Watkins became aware of some facts about Atlantis’ financial condition that caused them concern about whether Atlantis would be in business for another year. When Smith & Watkins approached the management of Atlantis about this, management agreed that there were some current uncertainties regarding the company’s future, but felt that the uncertainties were not serious enough to question the company’s ability to survive. Furthermore, management made it clear to the auditors that Atlantis planned to apply for a significant loan from First Bank to provide needed cash for operations and would greatly improve Atlantis’ financial situation. Management did not discuss the uncertainties surrounding Atlantis’ financial troubles in the company’s financial statements (and preferred that the auditors not mention them in the audit report) because they did not want to needlessly alarm First Bank.

Following the conversation with Atlantis’ management, Smith & Watkins continued the audit and collected additional evidence regarding the uncertainties about the company’s

future. When all the evidence was taken as a whole, Smith & Watkins determined that although Atlantis had various obstacles to overcome, they did not have substantial doubt that Atlantis could survive. Smith & Watkins ended their audit work for Atlantis in late February, 2000 and issued the standard, favorable audit report. The audit report did not include any details of concerns for Atlantis' continued existence.

Lawsuit

Atlantis filed for bankruptcy in September, 2000. First Bank, who had made a loan to Atlantis in March of 2000, is suing Smith & Watkins. First Bank is arguing that the local office of Smith & Watkins was negligent in their audit of Atlantis. First Bank is asking for \$2 million dollars (the current amount due on the loan to Atlantis) in compensatory damages from Smith & Watkins, CPAs.

The Arguments of First Bank

First Bank's attorney is claiming that Smith & Watkins incorrectly provided a favorable audit report on financial statements of a company that shortly thereafter went bankrupt. He is claiming that important information about uncertainties that led to the bankruptcy should have been disclosed to the public. He is arguing that had First Bank known of the uncertainties, it would not have made the loan to Atlantis. He also argues that the local office of Smith & Watkins inappropriately gave in to management's preference not to disclose Atlantis' questionable ability to continue. Furthermore, he points out that the compensation of the audit partner (in charge of the Atlantis audit) is based on the performance of the local office of Smith & Watkins.

The Arguments of Smith & Watkins

The attorney for Smith & Watkins is arguing that Smith & Watkins followed their profession's guidance for determining how to report on the ability of Atlantis to stay in business. He claims that Smith & Watkins considered all the circumstances and concluded that, in their professional judgment, there wasn't "substantial" doubt that Atlantis could continue in business.

Case Background – Low Client Importance, Large Audit Firm

Atlantis

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CPA Firm Audit

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During the 1999 audit, Smith & Watkins became aware of some facts about Atlantis’ financial condition that caused them concern about whether Atlantis would be in business for another year. When Smith & Watkins approached the management of Atlantis about this, management agreed that there were some current uncertainties regarding the company’s future, but felt that the uncertainties were not serious enough to question the company’s ability to survive. Furthermore, management made it clear to the auditors that Atlantis planned to apply for a significant loan from First Bank to provide needed cash for operations and would greatly improve Atlantis’ financial situation. Management did not discuss the uncertainties surrounding Atlantis’ financial troubles in the company’s financial statements (and preferred that the auditors not mention them in the audit report) because they did not want to needlessly alarm First Bank.

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Case Background – High Client Importance, Small Audit Firm

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CPA Firm Audit

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The Audit of Atlantis

The independent auditor for Atlantis is Smith & Watkins, CPAs. Smith & Watkins is a relatively small auditing firm with offices in 4 cities; it employs about 230 professionals. Audits of companies are overseen by individual offices within Smith & Watkins, so the local office of Smith & Watkins is responsible for the Atlantis audit. Atlantis is the largest client of the local office, representing approximately 60% of the office’s revenues.

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Case Background – Low Client Importance, Small Audit Firm

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CPA Firm Audit

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The Arguments of Smith & Watkins

The attorney for Smith & Watkins is arguing that Smith & Watkins followed their profession's guidance for determining how to report on the ability of Atlantis to stay in business. He claims that Smith & Watkins considered all the circumstances and concluded that, in their professional judgment, there wasn't "substantial" doubt that Atlantis could continue in business.

QUESTIONNAIRE – Same for All Cases

Please respond to the following:

NEGLIGENCE

In order to recover on its negligence claim against Smith & Watkins, First Bank must establish the following four elements by a preponderance of the evidence:

1. Smith & Watkins had a duty to the bank to exercise reasonable care in the performance of the audit of Atlantis
2. Smith & Watkins failed to discharge its duty of reasonable care
3. That such failure was the cause in fact of First Bank's damages
4. That such failure was the direct or proximate cause of First Bank's damages

1. Was Smith & Watkins, CPAs, negligent in the performance of the audit for Atlantis?

Please Circle One: 1 = Yes 2 = No

2. How confident are you in your answer to Question #1?

Please circle number:	Not at all	Completely
Confident	1.....2.....3.....4.....5.....6.....7	Confident

If you answered “Yes” to Question #1, continue on with *compensatory damages* (below).

If you answered “No” to Question #1 STOP and place this document back into the WHITE ENVELOPE. Once you have done so Open the BROWN ENVELOPE and continue with the questionnaire inside the brown envelope, please do not remove this document from the white envelope.

COMPENSATORY DAMAGES

How much would you award First Bank in *compensatory damages*?

Compensatory damages are awarded to compensate the plaintiff for losses incurred as a result of the defendant's actions. Such damages shall not include any interest which would have been earned by the bank on its loans, attorney's fees, or costs associated with the collection of the loan.

Please indicate the dollar amount: \$ _____

(continued on next page)

PUNITIVE DAMAGES

3. Do you believe that Smith & Watkins, CPAs, should have to pay punitive damages?

Punitive damages: If you find that First Bank's loss was attended by circumstances of fraud or malice, then you may also assess a reasonable sum as punitive damages. Punitive damages, if assessed, are to be assessed as punishment of the defendant, and as an example to others.

Fraud means an intentional misrepresentation, deceit or concealment of a material fact known to the defendant with the intention on the part of the defendant of causing injury. **Malice** means despicable conduct which is carried on by the defendant with a willful and conscious disregard for the safety of others. A person acts with conscious disregard of the safety of others when he is aware of the probable dangerous consequences of his conduct and willfully fails to avoid those consequences.

Please Circle One:

1 = Yes

2 = No

If you answered "Yes" to Question 3, indicate the dollar amount of punitive damages:

The law provides no fixed standards as to the amount of punitive damages. In arriving at any award of punitive damages, you are to consider the following: (1) The reprehensibility of the conduct of the defendant. (2) The amount of punitive damages which will have a deterrent effect on the defendant in light of the defendant's financial condition.

\$ _____

You have now completed the first questionnaire. What to do:

- 1. STOP and place this document back into the WHITE ENVELOPE. Once you have done so, please do not remove this document from the white envelope.**
- 2. Open the BROWN ENVELOPE and continue with the questionnaire inside.**

SECOND QUESTIONNAIRE – Same for All Cases

Please respond to the following questions:

4. **How financially important was Atlantis (as a client) to the local office of Smith & Watkins?**

Circle Number: Not at all
Important 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Extremely
Important

5. **How wealthy is Smith & Watkins, CPAs (the *firm*)?**

Circle Number: Not at all
Wealthy 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Extremely
Wealthy

6. **How responsible is Smith & Watkins for First Bank's Loss?**

Circle Number: Not at all
Responsible 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Responsible

7. **How able is Smith & Watkins, CPAs (the *firm*) to financially compensate First Bank?**

Circle Number: Not at all
Able 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Extremely
Able

8. **How would you describe the size of the firm Smith & Watkins, CPAs?**

Circle Number: Not at all
Large 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Extremely
Large

9. **To what extent do you believe Smith & Watkins, CPAs, caused First Bank's loss?**

Circle Number: Did not
Cause 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Caused

10. **To what extent do you believe First Bank is responsible for its own loss?**

Circle Number: Not at all
Responsible 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Responsible

11. **To what extent do you believe that the local office of Smith & Watkins was objective during the audit of Atlantis?**

Circle Number: Not at all
Objective 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Objective

(please continue on the next page)

12. To what degree do you believe Smith & Watkins, CPAs, should be punished?

No Punishment	Mild Punishment	Severe Punishment	Extremely Severe Punishment
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Circle Number: 0.....1.....2.....3.....4.....5.....6.....

13. To what degree do you believe that the auditors Smith & Watkins, CPAs, gave in to Atlantis by not disclosing uncertainties about its future?

Circle Number: Did not Give In 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely Gave In

14. To what degree do you believe that the auditors of Smith & Watkins, CPAs, were protecting their own interests by not warning stockholders and creditors of negative business conditions?

Circle Number: Not at all Completely
Serving Serving
Own Interests Own Interests

15. To what extent did Smith & Watkins, CPAs, foresee Atlantis' bankruptcy?

Circle Number: Did Not Completely
Foresee 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Foresaw

16. To what extent did Smith & Watkins, CPAs, have a responsibility to warn others of Atlantis' negative business conditions?

Circle Number: No _____ Complete Responsibility
Responsibility 1.....2.....3.....4.....5.....6.....7.....8.....9.....10

17. To what extent do you believe that the local office of Smith & Watkins (responsible for the Atlantis audit) was independent of Atlantis?

18. To what extent do you blame Smith & Watkins CPAs for First Bank's loss?

Circle Number: No 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 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(please continue on the next page)

19. What percentage of annual revenues did Atlantis represent for the local office of Smith & Watkins, CPAs?

_____ %

Please provide the following information:

Age: _____

GPA: _____

SAT: _____

20. Gender: (Circle One) 1 = Male 2 = Female
21. Marital Status: (Circle One) 1 = Single 2 = Married
22. Annual Family Income: (Circle One)
 1 = 0-14,999 3 = 30,000-49,999 5 = 100,000+
 2 = 15,000-29,999 4 = 50,000-99,999

23. What is your highest level of education attained? (Circle One)

1 = Some High School 2 = High School Graduate 3 = Some College 4 = College Graduate
5 = Some Graduate School 6 = Master's Degree 7 = PhD

24. Employment Status: (Circle One) 1 = Employed 2 = Unemployed 3= Retired
25. Have you ever owned stock before? (Circle One) 1 = Yes 2 = No
26. Are you a current stockholder? (Circle One) 1 = Yes 2 = No
27. Do you own real property? (Circle One) 1 = Yes 2 = No
28. Have you ever served on a civil jury before? (Circle One) 1 = Yes 2 = No
29. How many accounting courses have you had? _____
30. How many business courses have you had? _____
31. How many law and political science courses have you had? _____
32. What is your current status? 1 = Freshman 2 = Sophomore 3 = Junior 4 = Senior
 5 = Grad
33. How many years of business experience do you have? _____

(please continue on the next page)

Please respond to the following questions about auditors in general: Please circle a number

34. Auditors should gather all of the evidence that they can possibly get before drawing any conclusions about the financial statements.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Agree

35. Auditors should always perform a complete review of the client's accounting system and of the controls over the system, even if they can verify the numbers on the financial statements without doing so.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Agree

36. Auditors work for the companies whose financial statements they audit, so they have to allow their clients some latitude in what they report.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Agree

37. One role of the auditor is to be an insurer against large losses.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Agree

38. The audit firms make plenty of money during the good times, so they should share in losses during the bad times.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Agree

39. Corporations and their auditors work hand-in-glove and tell the public only what they want to tell.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Agree

40. Auditors should always create and perform special tests designed to discover fraud, even if the company's owners and managers seem to be honest.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Agree

41. In the performance of an audit, it is the auditor's responsibility to actively search for instances of fraud in financial reporting, no matter how small.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Agree
(please continue on the next page)

42. Even though auditors are hired by and paid by their clients, their responsibility is to the public; they should try and put the public's interests before the client's in designing their tests.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Agree

43. Auditors must examine all aspects of a company's financial health in order to properly do their jobs.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Agree

44. Auditors should be completely objective and unaffected by their clients' wishes.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Agree

45. Auditors should be completely independent of their clients, so they should not accommodate their clients' wishes during the audit.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Agree

46. If auditors always required only the strongest type of evidence, audits would be too expensive.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Agree

47. To what degree did you understand the case and questionnaire?

Did Not
Understand 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Understood

48. To what degree did you find the court case interesting?

Not at all
Interesting 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Extremely
Interesting

(please continue on the next page)

Please respond to the following questions about litigation: Please circle a number

49. There are far too many frivolous lawsuits today.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Agree

50. Juries do a good job determining the outcomes of lawsuits and assessing damages.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Agree

51. By making it easier to sue, the courts have made this a safer society.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Agree

52. The large number of lawsuits shows that our society is breaking down.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Agree

53. Most people who sue others in court have legitimate grievances.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Agree

54. The money awards that juries are awarding in civil cases are too large.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Agree

55. People are too quick to sue, rather than trying to resolve disputes some other way.

Completely
Disagree 1.....2.....3.....4.....5.....6.....7.....8.....9.....10 Completely
Agree

You have now completed the survey.

- 1. Please place this document back into the BROWN ENVELOPE.**

Your participation is greatly appreciated.

VITA

Duane Michael Brandon

Duane Brandon was born in Portsmouth, Virginia on December 23, 1973. He graduated from Western Branch High School in 1991 and went on to graduate from Christopher Newport University in 1997 with a Bachelor of Science in Accounting and from Virginia Tech in 1998 with a Master of Accountancy. After a brief stint as a staff accountant with Witt, Mares & Company, PLC, he began his doctoral studies at Virginia Tech in 1999.