University of Alberta

The Impact of Regulatory Scrutiny on the Resolution of Material Accounting Issues

by

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A thesis submitted to the Faculty of Graduate Studies and Research
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
in
Accounting

School of Business

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To my girls

ABSTRACT

Although auditor-client interaction is considered an important determinant of financial reporting outcomes, concerns often arise that close working relationships between auditors and client managers can impair auditor independence. Several high-profile accounting scandals have intensified these concerns, impaired investors' confidence in the financial reporting process and motivated regulators to respond with reforms to enhance auditors' responsibility for maintaining financial reporting quality. Subsequent reports from the financial press indicate that these reforms had a chilling effect on the auditor-client relationship, but academic research has not examined the influence of regulatory scrutiny on the resolution of material accounting issues between auditors and managers. This study contributes to the literature by investigating the impact of regulatory scrutiny on auditors' approach to resolving material accounting issues with managers and examining whether this impact is moderated by managers' commitment to their preferred accounting. Auditors' interaction approach involves developing arguments and recommendations in response to managers' accounting preferences in an attempt to persuade managers to adopt more appropriate accounting. The results of an experiment with experienced auditors indicate that regulatory scrutiny and managers' commitment to their preferred accounting interact to influence auditors' interaction approach. Specifically, when regulatory scrutiny is low, reciprocity norms determine auditors' interaction approach but, as regulatory scrutiny increases, accountability demands dominate auditors' reciprocity motivations and modify auditors' responses to managers'

accounting preferences. These results provide evidence that regulatory scrutiny introduces tension into the auditor-client relationship, but the effects of this tension on the resolution of material accounting issues is contingent on the interpersonal context.

ACKNOWLEDGEMENTS

I am grateful for the opportunity to develop this research under the guidance of Mike Gibbins, a true scholar and mentor.

Thank you to Karim Jamal and Jeff Schimel, as members of my supervisory committee, for their valuable suggestions and encouragement. I also thank Roy Suddaby and Peter Tiessen for serving on the examining committee and Jane Kennedy for serving as the external examiner.

I appreciate the excellent research assistance provided by Krista Fiolleau and Kris Hoang.

Helpful comments on earlier drafts of this thesis were provided by Amy Choy, Khim Kelly, Justin Leiby, Mark Peecher, Rajib Doogar, Steven Salterio, Daniel Thornton and seminar participants at the University of Alberta, University of Illinois at Urbana-Champaign, University of Waterloo and Queen’s University.

I am thankful for my parents, Ignatius and Hilda, and my sister, Sonya, for their constant support even when my “homework” seemed to take forever. I also appreciate my family, Randall, Joyce and Meghan, for their encouragement and optimism throughout this western road trip.

Thank you to an unforgettable cast of characters: Sarah and Adrian Bernardo, Mike Bone, Neil and Allison Brigden, Amir Fahimi, Krista and Rene Fiolleau, Ryan Flannigan, Jose Garza, Mark and Andrea Hanki, Kris and Quoc Hoang, Tom Hughes, Le Luo, Erin Marshall, Lesley Revell and Matt and Angela Rudolph.

Most of all, I thank Melynda and Molly for waiting.

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1. INTRODUCTION

Audited financial statements are a product of interactions between auditors and client managers to discuss, negotiate and resolve material accounting issues (Magee and Tseng 1990; Antle and Nalebuff 1991; Gibbins et al. 2001, 2005). These interactions are strategic in that auditors and managers attempt to persuade others to adopt preferred alternatives, obtain information in anticipation of a dispute and collaborate to develop justifiable reporting positions (e.g. Gibbins et al. 2001, 2005, 2007; Trotman 2005). While ongoing auditor-client interaction can benefit the financial reporting process by increasing information flows, identifying important issues, enabling mutual understanding when important issues arise and developing auditors' client business knowledge, the development of close working relationships between auditors and managers raise concerns about the ability of auditors to independently evaluate management's accounting information (Bazerman et al. 1997; Moore et al. 2006).

High-profile accounting scandals threaten investors' confidence in the securities markets and stimulate calls for enhanced standards for internal control, corporate governance and auditor independence. The Sarbanes-Oxley Act (SOX) is a recent example of regulation that responded to auditor independence concerns by restricting the auditor-client relationship (e.g. limitations on auditor tenure and non-audit services) and modified auditors' accountability environment by strengthening the audit committee and creating a rigorous auditor oversight program (e.g. the Public Company Accounting Oversight Board or PCAOB in the US; and the Canadian Public Accountability Board or CPAB in Canada).

Following the adoption of these regulatory reforms, archival researchers examined the impact of regulatory scrutiny on financial reporting outcomes and found that auditors were more conservative in the post-SOX regulatory environment (e.g. Cahan and Zhang 2006; Lobo and Zhou 2006; Li 2009), but academic research has not yet investigated the influence of regulatory scrutiny on auditor-client interaction to discuss, negotiate and resolve material accounting issues. The purpose of this study is to provide insight into this issue with an examination of the impact of regulatory scrutiny on auditors' approach to resolving material accounting issues with managers.

While academic research has not provided many insights about the effects of regulatory scrutiny on auditor-client interaction, the financial press suggests that regulatory scrutiny has a *chilling effect* on the auditor-client relationship with real effects on auditors' approach to resolving material accounting issues with managers (Kelly 2004; O'Sullivan 2004; Sayther 2004; Goff 2005; Krell 2005; Millman 2005; Nixon 2005; Banham 2006; Milligan 2006; Pollock 2006; Spinella 2006; Stephens and Schwartz 2006). Since the implementation of SOX, many financial executives have reported that auditors are increasingly reluctant to provide consultation on the accounting for new transactions and other material reporting decisions. This reluctance appears to be driven by concerns among auditors that discussing material accounting decisions with managers could result in becoming overly involved in management's decision making process, thereby impairing independence. Financial executives have also cited instances where auditors interpreted requests for technical accounting advice as a signal of management incompetence and an indication of an internal control weakness.[1] In response, many financial executives have been increasingly reluctant to bring accounting concerns or preliminary research to the auditors to avoid appearing unprepared and public companies are increasingly seeking third-party consultation to fill the information void.

Increased tension in the auditor-client relationship could be viewed as an intended consequence of regulatory scrutiny but even regulators are concerned about cost and process losses resulting from reduced accounting discussions. For example, the PCAOB (R2005-009, pg. 12) issued guidance in response to reports of a chilling effect to clarify to auditors that "information sharing on a timely basis between management and the auditor is necessary" and "[a]uditors may also provide audit clients technical advice on the proper application of GAAP…" This response suggests that the PCAOB recognizes the importance of auditor-client interaction and is concerned about the potential consequences (e.g. reduced information sharing) of regulatory scrutiny on these interactions. Therefore, research that investigates these potential consequences would be beneficial in understanding how auditors modify their interaction strategy in response to regulation-induced accountability demands.

This study experimentally examines the impact of regulatory scrutiny on auditor-client interaction to resolve material accounting issues. In particular, this study investigates whether auditors' approach to responding to accounting alternatives proposed by managers is influenced by the degree of regulatory

[1] The terms *advice*, *consultation* and *recommendation* are used interchangeably throughout the paper.

scrutiny and managers' commitment to their accounting preferences.[2] The hypotheses are developed from reciprocity theory and accountability theory which predicts that individuals reward actions that are perceived as kind and punish actions that are perceived as unkind (Gouldner 1960; Falk and Fischbacher 2006), and individuals who are "under the evaluative scrutiny of important [audiences]" seek to establish or preserve "a desired social identity vis-à-vis these [audiences]" (Tetlock 2002, pg. 494). The hypotheses predict that, when regulatory scrutiny is low, reciprocity norms determine auditors' interaction approach but, as regulatory scrutiny increases, accountability demands dominate auditors' reciprocity motivations and modify auditors' responses to managers' accounting preferences. The experiment manipulates the following two independent variables: (1) whether or not the client firm is subject to regulatory scrutiny; and (2) the degree to which the client manager is committed to an aggressive accounting preference before discussing the issue with the auditor. Auditors' intended interaction approach is measured by analyzing the content of their written responses to managers' accounting preferences.

A sample of 57 experienced auditors participated in the experiment. The results indicate that, when regulatory scrutiny is low: (1) auditors generate more arguments in response to accounting preferences proposed by committed managers compared to the same preferences proposed by less committed managers; (2) auditors are more likely to recommend an alternative to accounting preferences proposed by committed managers compared to the same preferences

[2] Both auditors' responses and managers' commitment reflect intention to interact in resolving material accounting issues.

proposed by less committed managers; and (3) auditors are equally committed to accounting recommendations rejected by committed managers compared to less committed managers. These results provide evidence that, when regulatory scrutiny is low, auditors reciprocate manager commitment by generating more supportive responses to accounting preferences proposed by less committed managers compared to committed managers. However, consistent with predictions, the results change direction when auditors are constrained by regulation-induced accountability demands. In particular, the results indicate that, as regulatory scrutiny increases: (1) auditors generate fewer arguments in response to accounting preferences proposed by committed managers and generate more arguments in response to the same preferences proposed by less committed managers; (2) auditors are less likely to recommend an alternative to accounting preferences proposed by committed managers and more likely to recommend an alternative to the same preferences proposed by less committed managers; and (3) auditors are more committed to accounting recommendations rejected by committed managers and less committed to recommendations rejected by less committed managers. These results demonstrate that regulatory scrutiny introduces additional tension into the auditor-client relationship and influences auditors' approach to resolving material accounting issues with managers. In addition, the impact of regulatory scrutiny on auditors' interaction approach is contingent on managers' commitment to their accounting preferences, which is an important determinant of the auditor-client relationship (Gibbins et al. 2008). Specifically, when regulatory scrutiny is high, auditors withhold arguments and recommendations from committed managers to prevent these managers from exploiting shared information and developing counterarguments, and auditors openly disclose arguments and recommendations to less committed managers because these managers seek to develop justifiable positions. The documented impact of regulatory scrutiny and manager commitment on the resolution of material accounting issues suggests that regulatory reforms have important implications to the financial reporting process, but these implications are not one-size-fits-all.

The remainder of this paper is organized as follows. Section two discusses prior research on auditor-client interaction followed by a description of the theory and hypotheses. Section three describes the experimental method and introduces the conceptual variables. Finally, Section four presents the results and Section five concludes the study with a discussion of the results and opportunities for future research.

2. BACKGROUND AND HYPOTHESIS DEVELOPMENT

Human interaction is strategic in that individuals are motivated to communicate with others in an attempt to influence or persuade, obtain information, understand their context or to meet social needs (Hample 2003; Berger 2005; Fiedler 2007). These interaction goals are achieved through communication, a primary mechanism through which individuals affect, and are affected by, others (Krauss and Fussell 1996). The accounting literature recognizes the importance of strategic interaction in the financial reporting context (e.g. Gibbins et al. 2001, 2005, 2007; Trotman 2005) and has examined auditor-client interaction from two perspectives: (1) an exchange between two rational economic agents; and (2) an exchange between two boundedly rational decision makers in a complex organizational and interpersonal context.

According to the agency literature, auditors and managers have divergent interests regarding the outcome of the financial statements but they both have incentives to maintain the auditor-client relationship (DeAngelo 1981; Kofman and Lawarée 1993). Auditors have reputational incentives for uncovering and resolving reporting problems and employ conservative GAAP arguments to support their accounting preferences to reduce litigation risk and ensure financial reporting integrity (Palmrose 1988; Kinney and Martin 1994; Simunic and Stein 1996; DeFond and Subramanyam 1998; Nelson et al. 2002). Conversely, managers are often motivated to take aggressive accounting positions to ensure good news is reported promptly and bad news is not revealed or is delayed (Defond and Jiambalvo 1993; Dechow et al. 1995; Burgstahler and Dichev 1997; Kothari et al. 2009). To prevent or delay auditors from disclosing bad news, managers have incentives to persuade auditors to concur with selectively reporting the company's financial condition (Kofman and Lawarée 1993, 1996). This perspective concludes that auditor-client interaction involves attempts by managers to convince auditors to agree with their preferred reporting options and attempts by auditors to persuade managers to accurately report the company's financial condition.

According to surveys of audit partners' and financial executives' negotiation experiences, auditor-client interaction to resolve accounting disputes is a normal yet material component of the financial reporting process that operates in a complex organizational and interpersonal context (Gibbins et al. 2001, 2005, 2007, 2008). Models of accounting negotiation developed in survey research conclude that accounting disputes are triggered by events such as the accounting for new transactions, and involve the acquisition and exchange of information, discussion of accounting issues, identification of potential outcomes and resolution of issues (Gibbins et al. 2005).

To refine models of accounting negotiation, experimental studies have identified a variety of organizational and interpersonal factors that influence negotiation outcomes (e.g. Nelson and Tan 2005; Brown and Wright 2008). Trotman et al. (2005) simulate actual negotiations with auditor participants and a confederate playing the role of the manager and find that auditors obtain better negotiation outcomes when they carefully consider management's perspective. Bame-Aldred and Kida (2007) investigate auditor and manager negotiation positions and tactics and find that managers are more flexible and more likely to use negotiation tactics compared to auditors. Ng and Tan (2003) find that the availability of authoritative guidance influences auditors' perceived negotiation outcomes, particularly when the audit committee is not effective. Sanchez et al. (2007) provide evidence that CFOs are more likely to accept material audit adjustments when they are informed that the auditor had previously waived immaterial adjustments, and Hatfield et al. (2008) find that auditors are more likely to waive immaterial adjustments in an attempt to persuade managers to accept material adjustments when management's negotiation style is competitive and client retention risk is high. These studies provide evidence that contextual (e.g. the availability of authoritative guidance) and interpersonal (e.g. reciprocity norms) factors have a significant impact on negotiated outcomes.

This study investigates the impact of regulatory scrutiny on auditor-client interaction to resolve material accounting issues. Whereas the accounting negotiation literature has examined auditors' and managers' bargaining behaviour without considering the persuasive communication process involved in resolving material accounting issues, this study considers the influence of a contextual factor (regulatory scrutiny) and the interpersonal context (managers' commitment to their preferred accounting) on the content of auditors' written responses to accounting alternatives proposed by managers. In focusing on auditors' written responses in a pre-negotiation interaction context, this research provides an opportunity to observe how auditors strategically construct arguments to persuade managers to adopt appropriate accounting policies.

Auditor-Client Interaction to Resolve Material Accounting Issues

Individuals consult with others before making important judgments and decisions to think of a problem in a different way, obtain new information or alternatives, improve decision accuracy and justification, and share accountability for the outcome (Heath and Gonzalez 1995; Harvey and Fischer 1997; Kennedy et al. 1997; Yaniv 2004; Bonaccio and Dalal 2006). In the financial reporting context, managers may discuss material accounting decisions with auditors to develop positions that incorporate auditors' expertise and reduce the possibility of subsequent disputes. In contrast, managers may commit to a position before discussing accounting decisions with auditors or may strategically discuss decisions in an attempt to persuade auditors to adopt preferred positions or to obtain information in anticipation of a dispute. Similarly, auditors are motivated to strategically discuss material issues with managers to encourage the adoption of appropriate reporting options.

The accounting negotiation literature has investigated factors that influence bargaining strategies and outcomes but academic research has not explored how auditors prepare to discuss material accounting issues with managers before a dispute is identified. In an interview study of audit partners' and financial executives' negotiation experiences, Gibbins et al. (2008) find that the auditor-client relationship is an important factor in the negotiation process, including the tendency for CFOs to consult (or not) with the audit partner on material accounting issues before committing to a position. Gibbins et al. (2008) also find that the auditor-client relationship can be characterized as a continuum with the following two endpoints: (1) proactive relationships are characterized by managers who are not committed to their accounting preferences before consulting the auditors, which results in early identification of accounting issues and frequent dialogue with the auditors to resolve important issues; and (2) reactive relationships exhibit later identification of accounting issues, greater tendency for managers to commit to their accounting preferences before consulting the auditors and greater difficulty in resolving disagreements.

Gibbins et al. (2008) find that managers determine the type of relationship they want with their auditor and auditors are responsible for managing the relationship. While managers define the relationship, auditors prefer to interact with proactive managers because important issues are resolved earlier, resulting in fewer surprises, a smoother dispute resolution process, increased information sharing and lower risk for the auditor. This research indicates that the auditor-client relationship plays an important role in the dispute resolution process and can influence auditors' approach to discussing material accounting issues with managers.

This study incorporates an important feature of proactive and reactive auditor-client relationships, managers' commitment to their accounting preferences, and examines its influence on the arguments and recommendations auditors generate in anticipation of a discussion with managers. To focus on the impact of regulatory scrutiny, the hypotheses initially consider auditors' responses to committed and less committed managers in an environment of low regulatory scrutiny, and the stability of these base line hypotheses is then examined in an environment of high regulatory scrutiny. Therefore, this research investigates whether the impact of regulatory scrutiny on the resolution of material accounting issues is moderated by manager commitment.

Auditor-Client Interaction in an Environment of Low Regulatory Scrutiny

Reciprocity is a pervasive norm of social behaviour that motivates individuals to reward actions that are perceived as kind and punish actions that are perceived as unkind (Gouldner 1960; Hoffman et al. 1996, 1998; Falk and Fischbacher 2006). The accounting literature has examined reciprocity motivations in the auditor-client negotiation context and the results indicate that auditors and mangers reciprocate concessionary bargaining behaviour, and auditors employ reciprocity-based strategies when resolving material accounting disputes with managers (Ng and Tan 2003; Nelson and Tan 2005; Sanchez et al. 2007; Hatfield et al. 2008). The prevalence of reciprocal behaviour in auditor-client interaction suggests that reciprocity norms influence auditors' approach to resolving material accounting issues with managers.[3]

Auditors are responsible for verifying the appropriateness of managers' accounting decisions based on an evaluation of the available evidence. In cases where auditors' evaluations lead them to disagree with the appropriateness of managers' preferences, auditors are motivated to communicate their concerns and persuade managers to adjust the financial statements. To convince managers to modify their accounting preferences, auditors are expected to develop arguments that dispute managers' preferences, question the rationale for managers' preferences or promote the adoption of more appropriate policies. Consistent with the communication literature, I define an argument as an exchange of messages "in contemplation of actual or potential disagreement" with the purpose of the exchange being to convince the message recipient to adopt beliefs or engage in actions that are favourable to the sender (Hample 2003, pg. 439).

When discussing accounting issues with managers who are committed to their accounting preferences, auditors recognize that these managers are not receptive to modifying their preferences unless auditors can develop compelling

[3] Gibbins et al. (2008) suggest that low manager commitment could be viewed as concessionary behaviour because the manager is providing the auditor with an opportunity to guide the manager towards appropriate reporting options.

arguments against managers' preferences or for alternative treatments.[4] In contrast, managers who are less committed to their preferences are amenable to alternative treatments, so auditors would require fewer arguments to motivate the adoption of more appropriate alternatives. Furthermore, auditors are responsible for maintaining the auditor-client relationship, which suggests that auditors would be concerned that an adversarial response would motivate less committed managers to commit to their preferences.[5] Finally, auditors are motivated to reciprocate concessionary manager behaviour, which suggests that auditors would respond (positively) negatively to (less) committed managers who are (receptive) resistant to auditor consultation by generating (fewer) more arguments in response to managers' accounting preferences.[6]

> H1a: Under low regulatory scrutiny, auditors generate more arguments in response to accounting preferences proposed by committed managers compared to the same preferences proposed by less committed managers.

While auditors can use arguments to persuade managers to modify their accounting preferences, auditors can also state their own preferences for particular alternatives to direct managers towards more appropriate reporting options. Managers who are committed to their preferences are motivated to dispute

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[4] This is consistent with the advice literature which finds that decision makers are more likely to follow recommendations when solicited and less likely to follow when the decision maker has already made a preliminary decision (Sniezek and Buckley 1995; Deelstra et al. 2003; Gibbons et al. 2003).

[5] Gibbins et al. (2008) find that, when interacting with committed managers, "other than the passage of time and getting to know the [manager] better, [auditors] appear not to have developed strategies to convert these [committed managers] into [less committed] managers" (pg. 364).

[6] While auditors have incentives to maintain the auditor-client relationship, difficult dispute resolutions could motivate the client firm seek another auditor. However, Gibbins et al. (2008) find that, in difficult relationships, auditors and managers still "work together to resolve the issues and even when the discussions become heated, the auditor is often able to maintain a cordial relationship with the client" (pg. 364).

auditors' arguments and auditors are expected to reciprocate by responding with more arguments and making their own preferences known. Managers who are less committed to their preferences are receptive to arguments and auditors are expected to reciprocate by responding with fewer arguments and guiding managers towards more appropriate alternatives without promoting specific alternatives.

> H2a: Under low regulatory scrutiny, auditors are more likely to recommend an alternative to accounting preferences proposed by committed managers compared to the same preferences proposed by less committed managers.

The accounting negotiation literature demonstrates that auditors do not necessarily expect their arguments and recommendations to prevail uncontested, so if managers maintain their accounting preferences after considering auditors' responses then auditors must decide whether to remain committed to their responses or accept alternatives closer to managers' preferences. Auditors are influenced by reciprocity norms which are expected to motivate auditors to be receptive to accounting preferences proposed by less committed managers and resistant to preferences proposed by committed managers. However, less committed managers weaken auditors' reciprocity motivations by maintaining their accounting preferences because these managers are expected to be amenable to arguments and recommendations. Committed managers are expected to be less receptive, so auditors are likely prepared to modify their preferences to avoid "the damage a confrontation would have on the [auditor-client] relationship" (Gibbins et al. 2008, pg. 381).

> H3a: Under low regulatory scrutiny, auditors are more committed to recommendations rejected by less committed managers compared to committed managers.

Auditor-Client Interaction in an Environment of High Regulatory Scrutiny

Auditors make decisions and interact with managers under the constraints of a complex accountability environment (Gibbins and Newton 1994). According to Lerner and Tetlock (1999, pg. 255), accountability is the "implicit or explicit expectation that one may be called on to justify one's beliefs, feelings, and actions to others," and individuals who are "under the evaluative scrutiny of important [audiences]" seek to establish or preserve "a desired social identity vis-à-vis these [audiences]" (Tetlock 2002, pg. 494). Hence, when preparing to respond to managers' accounting preferences, auditors attempt to evaluate information, develop opinions and make decisions that they believe would satisfy the preferences of their audience(s).

The accounting literature has examined the effects of accountability on auditor judgment primarily in the context of the audit review process. This research documents that auditors seek to persuade their superiors that the work performed and related documentation are appropriate and justifiable (e.g. Gibbins and Newton 1994; Peecher 1996; Kennedy et al. 1997; Gibbins and Trotman 2002; Tan and Trotman 2003). While archival research has examined the consequences of regulatory reforms on various measures of audit quality (e.g.

DeFond et al. 2002; Frankel et al. 2002; Ashbaugh et al. 2003; Myers et al. 2003; Kinney et al. 2004; Ghosh and Moon 2005), few behavioural studies have considered the accountability effects of regulatory scrutiny on individual decision makers in the financial reporting process. Cohen et al. (2007) conduct an extensive interview study of experienced auditors and find that auditors perceive audit committee members as more active, diligent and competent in the post-SOX environment. DeZoort et al. (2008) examine audit committee support for auditors' accounting positions and find that audit committee members are more supportive of auditors in the post-SOX environment. Gaynor et al. (2006) provide experimental evidence that audit committee members are less willing to hire auditors for non-audit services to avoid fee disclosures, even when these services could enhance audit quality. Piercey (2006, 2009) examines auditor risk assessments and demonstrates that documentation of auditors' risk assessments causes verbal risk assessments to become more aggressive but not numerical assessments. This research suggests that regulatory scrutiny can influence auditor behaviour but does not address the accountability effects of regulatory scrutiny on auditors' responses to managers' accounting preferences.

When regulatory scrutiny is high, auditors are accountable to audiences "who control valuable resources and who have some legitimate right to inquire into the reasons behind one's opinions or decisions" (Tetlock 2002, pg. 454). Accountability theory predicts that if auditors are aware of the preferences of their audience(s) then they attempt to make decisions that conform to these preferences (e.g. Lerner and Tetlock 1999; Tetlock 2002). While auditors do not necessarily know regulators' accounting preferences, archival research demonstrates that regulatory scrutiny influences auditors, managers and audit committee members to be more conservative in their reporting practices (e.g. Cahan and Zhang 2006; Gaynor et al. 2006; Lobo and Zhou 2006; Koh et al. 2008; Li 2009). This research suggests that auditors assume regulators want more conservative financial reporting, so regulatory scrutiny is expected to motivate auditors to persuade managers to adopt more conservative accounting in their responses to managers' preferences.

When discussing accounting issues with managers who are less committed to their accounting preferences, auditors have incentives to reciprocate managers' receptiveness to consultation with a supportive response (Gouldner 1960; Sanchez et al. 2007; Hatfield 2008), but regulatory scrutiny constrains auditors' ability to reciprocate. To balance accountability demands with reciprocity motivations, auditors can focus their arguments on identifying opportunities for managers to obtain additional support for their preferences or promote the adoption of more appropriate alternatives, rather than rejecting managers' preferences. However, accountability demands are expected to dominate reciprocity motivations and auditors are expected to respond by generating more arguments because less committed managers provide auditors with the "power to ensure compliance with all reasonable interpretations of GAAP" (Gibbins et al. 2008, pg. 380). Hence, while auditors are concerned with maintaining the auditor-client relationship when regulatory scrutiny is low, as regulatory scrutiny increases, auditors modify their interaction approach to satisfy accountability demands.

Managers who are committed to their accounting preferences make it difficult for auditors to satisfy their regulation-induced accountability demands for more conservative financial reporting. Reciprocity norms motivate auditors to generate more arguments in response to committed managers' preferences but this may not be an effective strategy against a manager who "actively contests any proposed changes in his accounting and actively challenges the legitimacy of the auditor's position" (Gibbins et al. 2008, pg. 380). Individuals who are committed to preferred conclusions tend to interpret information in a biased manner (Kunda 1990, 1999; Kadous et al. 2003), which suggests that committed managers would opportunistically interpret the information contained in auditors' responses in an attempt to promote their preferences. Furthermore, material accounting issues often involve ambiguity in identifying what alternatives are acceptable, so auditors would need to carefully construct their arguments to prevent committed managers from producing counterarguments that exploit ambiguity in accounting standards to support their preferences (Salterio and Koonce 1997; Nelson et al. 2002).

While information exchange is considered necessary to attain integrative negotiation agreements (Walton and McKersie 1965), strategic misrepresentation, such as withholding information, often occurs when negotiators believe that the "other party's interests are completely opposed to their own" (Thompson 1991, pg. 162). Individuals are particularly likely to withhold information when interacting with competitive others because the information could be exploited (Steinel and DeDreu 2004) and "allow the other negotiator to construct effective threats or locate and commit himself/herself to an [alternative] that is barely acceptable" (Kimmel et al. 1980, pg. 10). When regulatory scrutiny is high, auditors have a preference for conservative accounting while committed managers are reluctant to modify their preferences which results in a competitive interaction context. Auditors are particularly likely to withhold information in this context as shared information could be exploited and auditors have an information advantage in that they know committed managers' preferences before disclosing their own preferences. As a result, accountability demands are expected to overwhelm reciprocity motivations and auditors are expected to respond by withholding arguments from committed managers.[7] To summarize, manager commitment and regulatory scrutiny are predicted to interact to influence the number of arguments that auditors generate in response to managers' accounting preferences.

> H1b: As regulatory scrutiny increases, auditors generate fewer arguments in response to accounting preferences proposed by committed managers and generate more arguments in response to preferences proposed by less committed managers.

In an attempt to persuade managers to modify their accounting preferences, auditors can provide their own recommendations for particular alternatives to constrain managers to satisfy auditors' arguments and consider auditors' recommendations. While auditors are receptive to alternatives proposed by less committed managers, regulatory scrutiny induces auditors to promote

[7] Prior research indicates that auditors' decisions are viewed as more justifiable when made in consultation with other knowledgeable individuals (Emby and Gibbins 1988; Kennedy et al. 1997), which suggests that auditors may withhold arguments from committed managers until after consulting with others to ensure that their arguments are adequately developed and their recommendations are sufficiently justifiable.

more conservative accounting. When discussing accounting issues with managers who are not committed to their accounting preferences, auditors recognize that these managers want to make justifiable decisions, so auditors are expected to respond by making their own preferences known. Managers who are committed to their accounting preferences actively dispute auditors' recommendations and have incentives to exploit shared information, so auditors are expected to respond by withholding their recommendations. To summarize, manager commitment and regulatory scrutiny are predicted to interact to influence the likelihood that auditors recommend an alternative to managers' accounting preferences.

> H2b: As regulatory scrutiny increases, auditors are less likely to recommend an alternative to accounting preferences proposed by committed managers and more likely to recommend an alternative to preferences proposed by less committed managers.

When regulatory scrutiny is high, accountability demands and less committed managers' desire to make justifiable decisions encourage auditors to respond by promoting more conservative accounting. However, auditors' accountability-driven responses are likely to encounter resistance, particularly from less committed managers who anticipate supportive auditor responses. Since auditors prefer to interact with less committed managers (Gibbins et al. 2008) and do not want to influence these managers to commit to their accounting preferences, auditors are expected to be receptive to modifying their recommendations when rejected by less committed managers. Regulatory scrutiny influences auditors to be strategic in developing arguments and providing recommendations to committed managers which suggests that auditors are preparing for a difficult dispute resolution process. As a result, auditors would anticipate committed managers to maintain their preferences and auditors are expected to respond by remaining committed to their own preferences. To summarize, manager commitment and regulatory scrutiny are predicted to interact to influence auditor commitment to rejected recommendations.

H3b: As regulatory scrutiny increases, auditors are more committed to recommendations rejected by committed managers and less committed to recommendations rejected by less committed managers.

3. METHOD

Experimental Design and Task

This issue is examined with an experiment that employs a 2 X 2 between-subjects design with the following manipulated independent variables: Manager Commitment (Low vs. High) and Regulatory Scrutiny (Low vs. High). The task employed in this experiment is adapted from a revenue recognition case by Johnstone et al. (2002) and Kadous et al. (2003).[8] The adapted case was developed in consultation with senior audit partners from two Big 4 firms and later revised based on feedback received after conducting pre-tests with audit partners, faculty members and graduate business students.

[8] This case was selected because it has been extensively tested in prior research by experienced auditors and is based on an actual accounting issue that was resolved between the auditors and client management. In addition, the accounting issue is complex and the accounting standards are ambiguously defined which indicates that the issue would be difficult to resolve.

Participation in the experiment involved the completion of nine steps, which are outlined in Figure 1.[9] After receiving an invitation to participate, potential participants read instructions that described the purpose of the study, outlined the tasks to be performed and provided information about participant anonymity and confidentiality. Participants were then provided background information about their client, Medicopter Emergency Services Ltd. (MES), a helicopter transportation company. In the background information, participants learned that MES recently signed a one-year government contract with the Ambulance Service of Oregon to provide emergency medical transportation and search and rescue services that will allow the company to continue its trend of strong financial results. The contract is material and unlike any of the company's other helicopter transportation contracts, so revenue recognition is an important issue. After learning about the contract, participants were asked by their accounting firm to draft a response to a message sent by MES' CFO. In the message, the CFO explains his preference to recognize revenue related to the contract on a straight-line basis which is an aggressive alternative that recognizes a large portion of the contract revenue in the current year. Participants were then asked to draft their accounting firm's response to the CFO's preference on the amount of revenue to record related to the contract.

Along with background information and the message from MES' CFO, participants were presented with additional details about the contract and a summary of five revenue recognition alternatives considered by MES to account

[9] The nine steps participants followed were developed in consultation with the accounting literature and modified based on discussions with senior audit partners from two Big 4 firms.

for the contract. The revenue recognition issue requires considerable judgment, as contract revenue could be calculated using any of the five available alternatives, which would result in recording anywhere from $3,216,360 to $6,542,120 (the CFO's preferred alternative) in revenue related to the contract.[10] After reading the case materials, participants were asked to write out their response to the CFO's preference. Following the submission of their draft response, participants were asked to indicate the amount of revenue that they would recommend to be recorded related to the contract in the current year. Upon identifying their recommendation, participants were notified that their draft response to the CFO was essentially adopted as the accounting firm's response and participants were asked to complete some demographic questions while the CFO prepared a reply. The CFO then responded by stating that MES had decided to maintain its revenue recognition preference. Finally, participants were asked to predict the amount of revenue they believed would ultimately be recorded related to the contract in the current year and they completed the experiment by responding to debriefing questions. The research instrument is available in Appendix A.

Independent Variables

Manager commitment is manipulated by varying the content of the message sent by the CFO to describe his revenue recognition preference.[11] In the low manager commitment condition, the company's financial statements are in

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[10] All of the five revenue recognition alternatives available in the case materials conform to GAAP and are based on the alternatives identified by auditor participants in Johnstone et al. (2002) and Kadous et al. (2003). The total contract value ($9,813,180) is material (based on revenue and net income) and the difference between each revenue recognition alternative is material.

[11] To maintain consistency in the manager commitment manipulation throughout the experiment, the content of the CFO's reply to participants' written responses varies based on the level of manager commitment.

preparation; the CFO has not committed to a revenue recognition preference related to the contract but has a preference for a particular alternative; and the CFO has not presented the financial results based on his preference to the CEO because he is uncertain as to whether his preference is appropriate, and is willing to modify his revenue recognition preference. In the high manager commitment condition, a draft of the company's financial statements has been prepared; the CFO is committed to a revenue recognition alternative related to the contract and has presented the financial results based on his position to the CEO; and the CFO is confident that the selected position is appropriate and is reluctant to modify his revenue recognition position. In both conditions, the CFO's preference is to recognize revenue related to the contract on a straight-line basis.

Regulatory scrutiny is manipulated by varying the description of MES in the background information and the regulatory environment in which MES operates. In the low regulatory scrutiny condition, participations are informed that MES is a privately held company that has no intention of going public. Low regulatory scrutiny participants are also told that, as a privately held company, MES is not responsible for following public company regulatory requirements, but still voluntarily adopts best practices, and that the MES audit is not subject to working paper inspection by CPAB.[12] In the high regulatory scrutiny condition, participants are informed that MES has been a publicly traded company for several years. High regulatory scrutiny participants are also told that, as a publicly

[12] The low regulatory condition is labeled as "low" (rather than "no" regulatory scrutiny) because the client firm voluntarily adopts best practices, which are often developed and implemented in response to regulatory reforms. Furthermore, Canadian public accounting firms are subject to practice review by the provincial institutes and all audits, reviews and other engagements are subject to review.

traded company, MES must follow public company regulatory requirements and that the MES audit is subject to working paper inspection by CPAB. Appendix B provides a summary of the manipulations employed in the experiment.

Dependent Variables

The primary dependent variables are constructed by analyzing the content of participants' written responses to the CFO's revenue recognition preference related to the government contract. After participants read the case, details about the contract, the message from the CFO and a summary of the available revenue recognition alternatives, they were asked the following open-ended question:

> Based on the information presented, please prepare a draft response to the CFO's revenue recognition position related to the Ambulance Service of Oregon contract.[13]

After participants prepared and submitted their written responses, they were asked to provide a revenue recognition recommendation as follows:

> Based on your response to the CFO, what is the amount of revenue that you would recommend to be recorded related to the Ambulance Service of Oregon (ASO) contract in MES' 2007 financial statements?
>
> Please indicate an amount from $0 (i.e. recognize no revenue related to the contract) to $9,813,180 (i.e. recognize all the revenue related to the contract). Any amount between $0 and $9,813,180 indicates that you would recommend the revenue related to the contract to be partially recognized.
>
> **ENTER AMOUNT HERE**: **$ ________________________**

Upon receiving the CFO's reply and explanation that MES is maintaining its revenue recognition preference (the CFO maintains his preference in all

[13] The case materials referred to the CFO's preference for the straight-line method as his "revenue recognition position" in the high commitment condition and his "current thinking on revenue recognition" in the low commitment condition.

conditions), participants were asked to predict the outcome of the revenue recognition issue:

> In light of the CFO's reply to your response, how much revenue do you believe will ultimately be recorded related to the Ambulance Service of Oregon (ASO) contract in MES' 2007 financial statements?
>
> Please indicate an amount from $0 (i.e. recognize no revenue related to the contract) to $9,813,180 (i.e. recognize all the revenue related to the contract). Any amount between $0 and $9,813,180 indicates that you believe the revenue related to the contract would be partially recognized.
>
> **ENTER AMOUNT HERE**: $ ______________________[14]

Participants' revenue recognition recommendation and outcome prediction are used to measure auditor commitment to recommendations rejected by managers.

Participant Recruitment and Administration

Audit professionals from six Canadian provinces were recruited to participate in this study. Potential participants were required to have experience in helping prepare for or being directly involved in discussing material accounting issues with client management. Participants were indentified and recruited through senior partner contacts from a selection of offices of all the Big 4 firms and two international accounting firms. After learning about the study, each partner contact determined the number of potential participants that would be contacted and arranged the recruitment procedure. The study was administered with an Internet-based experiment and the partner contacts invited potential participants by distributing a recruitment letter via email which provided additional information about the study and described how participants could

[14] This question is adapted from Libby and Kinney (2000) and Ng and Tan (2003).

access and complete the experiment.[15] Appendix C provides additional details about the Internet-based administration; Appendix D contains the introductory letter that was sent to the senior audit partner contacts; and Appendix E contains the recruitment letter that was sent to potential participants.

4. RESULTS

Demographic Information and Debriefing Questions

A total of 57 auditors participated in the experiment.[16] The demographic information indicates that, on average, participants have 12.5 years of public company auditing experience, 13.1 years of private company auditing experience and 16.0 years of total auditing experience. When asked how often they participate in and prepare for discussions of accounting issues with their audit clients (0 = Never, 10 = Very Often), participants rated themselves as highly involved in both participating in (mean = 8.72) and preparing for (mean = 8.70) these issues. [17]

On average, participants took approximately 64 minutes to complete the experiment. Responses to the debriefing questions indicate that participants considered the case realistic (mean = 7.64 out of ten) and understandable (mean = 7.70 out of ten), and evaluated the task of responding to the CFO's revenue recognition preference as moderately difficult (mean = 5.62 out of ten). When

[15] The experiment was administered via the Internet because it provided an opportunity to recruit participants from several different firm offices and geographical locations. Furthermore, Internet-based administration provides access to difficult-to-reach, experienced auditor participants and generates data that is comparable in quality to laboratory experiments (Birnbaum 1999, 2001).
[16] Although a meaningful response rate could not be obtained because participant recruitment was managed by the contact partners, based on feedback from one of the contact partners, the response rate is estimated to be between 25-30%.
[17] One participant did not respond to the demographic and manipulation check questions. Participants with missing data are included in analyses for which data are available.

asked to rate materiality (0 = Definitely Not Material to 10 = Definitely Material), participants strongly indicated that they considered the revenue recognition issue material to MES' financial statements (mean = 9.41). Participants also indicated that they were not comfortable with the CFO's revenue recognition preference (mean = 2.47 out of ten) and considered the straight-line method both very aggressive (mean = 8.04 out of ten) and not appropriate (mean = 2.35 out of ten).

Manager Commitment – Manipulation Check Questions

To examine perceptions of manager commitment, participants were asked the following question: "Do you believe that the CFO was committed to his preferred revenue recognition alternative before you prepared your firm's draft response to the CFO's message?" Participants rated manager commitment (0 = Definitely Not Committed, 10 = Definitely Committed) higher in the high manager commitment condition compared to the low manager commitment condition (means [standard deviations] are 8.55 [1.72] and 7.41 [2.01], respectively, $t = 2.24$, $p = 0.01$, one-tailed).[18]

To determine whether the manager commitment manipulation influenced perceptions of the auditor-client relationship, participants were asked to indicate how they would characterize their firm's relationship with the CFO. Participants characterized the auditor-client relationship (0 = Very Weak, 10 = Very Strong) as stronger in the low manager commitment condition compared to the high

[18] Participants' responses to the manipulation check questions were recorded at the end of the experiment after the CFO indicated that MES has decided to maintain its revenue recognition preference. As a result, participants in the low manager commitment condition likely adjusted their beliefs about manager commitment after learning that MES has decided to maintain its revenue recognition preference. This design choice reduces the likelihood of finding a significant difference in participants' responses to the manipulation check questions across levels of manager commitment but recording the manipulation check questions at an earlier point in the experiment would have influenced participants' responses to the main dependent variables.

manager commitment condition (means [standard deviations] are 5.89 [1.93] and 3.93 [2.02], respectively, $t = 3.71$, $p = 0.00$, one-tailed). These results indicate that the manager commitment manipulation is in the intended direction and influences participants' perceptions of the auditor-client relationship.

Regulatory Scrutiny – Manipulation Check Questions

When asked whether MES is a public, private or not-for-profit company, all participants answered correctly according to their experimental condition. To examine whether participants were affected by the regulatory scrutiny manipulation, participants were asked the following question: "Based on the information provided, how would you rate the degree of regulatory scrutiny experienced by the MES audit?" Participants rated regulatory scrutiny (0 = Very Low Scrutiny, 10 = Very High Scrutiny) higher in the high regulatory scrutiny condition compared to the low regulatory scrutiny condition (means [standard deviations] are 7.46 [2.55] and 3.57 [2.67], respectively, $t = 5.58$, $p = 0.00$, one-tailed). Participants were also asked whether they believe that the MES audit working papers are accessible by CPAB for review (0 = Definitely Not Accessible, 10 = Definitely Accessible). Participants in the high regulatory scrutiny condition were more likely to believe that the MES audit working papers were accessible by CPAB compared to the low regulatory scrutiny condition (means [standard deviations] are 9.36 [1.42] and 1.43 [2.69], respectively, $t = 13.81$, $p = 0.00$, one-tailed). These results demonstrate that the regulatory scrutiny manipulation worked in the expected manner.

To investigate the influence of regulatory scrutiny on auditors' accounting preferences, participants were asked to evaluate the appropriateness (0 = Not At All Appropriate, 10 = Completely Appropriate) of each of the five available revenue recognition alternatives. Participants in the high regulatory scrutiny condition evaluated the appropriateness of the average rate method (means [standard deviations] are 4.64 [2.97] and 3.46 [2.74], respectively, $t = 1.50$, $p = 0.07$, one-tailed) and the usage rate method (means [standard deviations] are 8.00 [2.34] and 6.32 [2.99], respectively, $t = 2.29$, $p = 0.01$, one-tailed) higher compared to the low regulatory scrutiny condition. Conversely, participants in the high regulatory condition evaluated the appropriateness of the straight-line method lower (means [standard deviations] are 1.81 [1.83] and 2.86 [2.26], respectively, $t = 1.87$, $p = 0.03$, one-tailed) and characterized the straight-line method as more aggressive (means [standard deviations] are 8.43 [1.07] and 7.64 [1.57], respectively, $t = 2.19$, $p = 0.02$, one-tailed) compared to the low regulatory scrutiny condition. Given that the average rate and usage rate methods are the most conservative revenue recognition alternatives available to participants while the straight-line method is the most aggressive available alternative, these results support the expectation that regulatory scrutiny induces auditors to prefer more conservative reporting options.[19]

Dependent Variable Coding

Participants' written responses to the CFO's revenue recognition preference were analyzed to construct the following dependent variables: (1) the

[19] Participants' appropriateness evaluations did not differ significantly across levels of regulatory scrutiny for the gross margin/time elapsed and fixed/variable cost methods.

number of arguments participants generated in response to the CFO's preference (Number of Arguments); and (2) whether participants recommended an alternative to the CFO's preference (Auditor Recommendation). Every participant provided a written response and the dependent variables were independently coded from participants' responses by two graduate accounting students who were blind to experimental condition.[20] The coding instructions used to categorize idea units and identify recommendations are available in Appendix F.

The number of arguments is measured in terms of idea units, which are segments of written discourse that communicate a distinct and discrete perception, evaluation, procedure or fact (Koonce et al. 1995). The coders counted the total number of idea units for each response and every identified idea unit was then categorized based on a coding scheme that distinguishes arguments (or conclusions) from statements in support of specific arguments (or evidence). The hypotheses are tested by focusing on idea units related to conclusive arguments (e.g. "The straight-line method is not appropriate…"), rather than on supporting statements (e.g. "… because the contract has a variable component"), because arguments represent attempts to convince the message recipient to adopt beliefs or engage in actions that are favourable to the sender whereas supporting statements are in service of arguments (Hample 2003).[21] Appendix G describes the coding procedure used to categorize arguments.

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[20] Both coders are Chartered Accountants and have extensive auditing experience.
[21] Auditors' responses may contain extensive evidence that, in the absence of an explicit conclusion, could be interpreted as disputing managers' preferences but conclusions based on the evidence are necessary to encourage action. Without an explicit conclusion, any given piece of evidence can be interpreted to support multiple arguments. For example, an auditor who states that "EIC 141 does permit the straight-line method unless evidence suggests revenue is earned in a different pattern" could be interpreted as supporting ("revenue *is not* earned in a different pattern,

Arguments are defined as idea units that dispute the CFO's preference for the straight-line method, question the rationale for the CFO's preference or promote the adoption of less aggressive alternatives. Specifically, the number of arguments generated by each participant is measured as a composite of the following idea unit categories (See Appendix G for descriptions): (1) arguments against the CFO's preference (Arguments against the CFO); (2) arguments for the CFO's preference (Arguments for the CFO); (3) arguments for any alternative other than the CFO's preference (Arguments for other alternatives); (4) arguments against any alternative other than the CFO's preference (Arguments against other alternatives); (5) requests for additional information from the CFO to support or justify the CFO's preference (Requests for additional information); and (6) statements that explicitly recommend a particular course of action to resolve the revenue recognition issue (Recommendations).[22] To determine the overall extent to which each participant's response is focused on persuading the CFO to modify his revenue recognition preference, any arguments that support the CFO's preference or dispute other (less aggressive) alternatives are subtracted from the total number of arguments. Hence, the number of arguments is calculated as follows:

---

so the straight-line method *is* appropriate") or disputing ("revenue *is* earned in a different pattern, so the straight-line method *is not* appropriate") the straight-line method. Hence, an argument is not considered present unless a conclusion is generated from the evidence. In contrast, it is difficult to misinterpret a conclusive argument (e.g. "If you continue to choose to adopt the straight-line method of revenue recognition, our audit opinion would be qualified"), even if it is not supported with extensive evidence.

[22] Several robustness checks were conducted by removing idea unit categories from the composite variable used to measure the number of arguments. For example, the hypotheses were tested after excluding arguments for the CFO and arguments against other alternatives, then these idea unit categories were put back into the composite variable and the hypotheses were tested after excluding requests for additional information. Several of these robustness checks were conducted and the ANOVA results based on these modifications are significant (p-values ranging from 0.02 to 0.09) and consistent with the main results.

Number of Arguments = (1) Arguments against the CFO - (2) Arguments for the CFO + (3) Arguments for other alternatives - (4) Arguments against other alternatives + (5) Requests for additional information + (6) Recommendations

Auditor recommendation is measured as whether (or not) participants clearly promoted a revenue recognition alternative in their response to the CFO's revenue recognition preference. The coders summarized any recommendations generated by participants to resolve the revenue recognition issue, which could include: (1) a clear rejection of the straight-line method (e.g. "The straight-line method is not appropriate…"); (2) direct recommendations for a particular alternative (e.g. "I recommend that the usage rate method be adopted for this transaction…"); (3) suggestions to adopt a specific alternative (e.g. "I would suggest to recognize revenue according to the average rate method…"); (4) statements that indicate a clear preference for a particular alternative (e.g. "The usage rate method is preferable as the revenue is based on actual hours for usage for the two types of services…"); or (5) identifying a set of appropriate alternatives (e.g. "The average rate or usage rate methods would be appropriate…").[23] Participants were determined to have promoted an alternative

[23] The intra-class correlation between the two coders is 0.98 for the total number of idea units and 0.88 for the arguments variable which suggests that these measures are reliable. The two coders also obtained 96.49% agreement in identifying and categorizing participants' recommendations. After counting the number of idea units, allocating the idea units to categories and evaluating whether participants promoted an accounting alternative in their responses, the coders met to discuss their results and resolve any differences through discussion. The coders prepared a resolved coding document after resolving all of their differences, and that coding document was used to measure the dependent variables.

(0 = Recommendation Not Provided, 1 = Recommendation Provided) if a recommendation was provided and categorized under (2); (3); (4) or (5).[24]

Auditor commitment is measured as the difference between the amount of revenue participants recommended after submitting their response to the CFO and their prediction regarding the amount of revenue that would ultimately be recorded related to the contract after receiving a reply from the CFO indicating that MES has decided to maintain its revenue recognition preference. This difference represents the extent to which participants predict that the final outcome will deviate from their original recommendation.

Auditor Commitment = Predicted outcome - Original recommendation

Tests of Hypotheses

Number of Arguments (H1a & H1b)

Hypothesis 1a predicts that, under low regulatory scrutiny, auditors generate more arguments in response to accounting preferences proposed by committed managers compared to the same preferences proposed by less committed managers. To investigate the interaction between regulatory scrutiny and manager commitment, Hypothesis 1b predicts that, as regulatory scrutiny increases, auditors generate fewer arguments in response to committed managers and more arguments in response to less committed managers.

Table 1, Panel A provides the cell means and standard deviations for the number of arguments. The ANOVA results for the number of arguments (Table 1, Panel B) indicate no significant main effect for manager commitment ($p = 0.75$)

[24] Participants who rejected the straight-line method without recommending an alternative were coded as not providing a recommendation, while participants who rejected the straight-line method *and* recommended an alternative were coded as providing a recommendation.

or regulatory scrutiny ($p = 0.80$) but a significant interaction ($p = 0.02$). The significant disordinal interaction (presented in Figure 2) and the absence of main effects provides support for H1b. An analysis of simple effects provides support for H1a as participants in the high manager commitment condition generated significantly more arguments compared to the low manager commitment condition when regulatory scrutiny was low (means [standard deviations] are 5.13 [4.44] and 2.43 [3.76], respectively, $t = 1.76$, $p = 0.04$, one-tailed). Simple effects tests also demonstrate that, as regulatory scrutiny increased, participants in the high manager commitment condition generated fewer arguments (means [standard deviations] are 5.13 [4.44] and 3.00 [1.80], respectively, $t = 1.72$, $p = 0.05$, one-tailed) and participants in the low manager commitment condition generated more arguments (means [standard deviations] are 2.43 [3.76] and 5.07 [4.48], respectively, $t = 1.69$, $p = 0.05$, one-tailed).

Auditor Recommendation (H2a & H2b)

Hypothesis 2a posits that, under low regulatory scrutiny, auditors are more likely to recommend an alternative to accounting preferences proposed by committed managers compared to the same preferences proposed by less committed managers. To examine the interaction between regulatory scrutiny and manager commitment, Hypothesis 2b predicts that, as regulatory scrutiny increases, auditors are less likely to recommend an alternative to accounting preferences proposed by committed managers and more likely to recommend an alternative to preferences proposed by less committed managers.

Table 2, Panel A provides the cell means and standard deviations for auditor recommendation. The ANOVA results for auditor recommendation (Table 2, Panel B) demonstrate no significant main effect for manager commitment (p = 0.54) or regulatory scrutiny (p = 0.96) but a significant interaction (p = 0.03).[25] The significant disordinal interaction (presented in Figure 3) and the absence of main effects provides support for H2b. An analysis of simple effects provides support for H2a as participants in the high manager commitment condition were more likely to recommend an alternative to the CFO's revenue recognition preference compared to the low manager commitment condition when regulatory scrutiny was low (means [standard deviations] are 0.80 [0.41] and 0.43 [0.51], respectively, t = 2.14, p = 0.02, one-tailed). Simple effects tests also indicate that, as regulatory scrutiny increased, participants in the high manager commitment condition were less likely to recommend an alternative to the CFO's revenue recognition preference (means [standard deviations] are 0.80 [0.41] and 0.50 [0.52], respectively, t = 1.71, p = 0.05, one-tailed) and participants in the low manager commitment condition were marginally more likely to recommend an alternative to the CFO's preference (means [standard deviations] are 0.43 [0.51] and 0.71 [0.47], respectively, t = 1.54, p = 0.07, one-tailed).

Auditor Commitment (H3a & H3b)

Hypothesis 3a anticipates that, under low regulatory scrutiny, auditors are more committed to recommendations rejected by less committed managers

[25] Lunney (1970) demonstrates that ANOVA is an appropriate statistical technique for dichotomous dependent variables when cell sizes are approximately equal, the proportion of responses in the smaller category is equal to or greater than 0.20 and the error term has at least 20 degrees of freedom.

compared to committed managers. To explore the interaction between regulatory scrutiny and manager commitment, Hypothesis 3b predicts that, as regulatory scrutiny increases, auditors are more committed to recommendations rejected by committed managers and less committed to recommendations rejected by less committed managers.

Table 3, Panel A provides the cell means and standard deviations for auditor commitment. The ANOVA results for auditor commitment (Table 3, Panel B) indicate no significant main effect for manager commitment ($p = 0.41$) or regulatory scrutiny ($p = 0.54$) but a significant interaction ($p = 0.05$). The significant disordinal interaction (presented in Figure 4) and the absence of main effects provides support for H3b. An analysis of simple effects does not provide support for H3a as participants in the low manager commitment condition were not significantly more committed to recommendations rejected by the CFO compared to the high manager commitment condition when regulatory scrutiny was low (means [standard deviations] are 0.08 [0.23] and 0.33 [1.06], respectively, $t = 0.89$, $p = 0.39$). Simple effects tests also indicate that, as regulatory scrutiny increased, participants in the low manager commitment condition were less committed to recommendations rejected by the CFO (means [standard deviations] are 0.08 [0.23] and 0.63 [1.13], respectively, $t = 1.79$, $p = 0.05$, one-tailed) and participants in the high manager commitment condition were not significantly more committed to recommendations rejected by the CFO (means [standard deviations] are 0.33 [1.06] and 0.04 [0.13], respectively, $t = 1.06$, $p = 0.31$).

5. DISCUSSION AND CONCLUSIONS

Accounting scandals perpetrated by the top levels of management at Enron, Tyco, WorldCom and other multinational corporations weakened investor confidence in the financial reporting process and in the ability of auditors to independently evaluate the credibility of accounting information. In response to these high-profile frauds, regulators have implemented wide-reaching legislation which has substantially intensified the scrutiny of financial reporting. While the financial press suggests that regulatory reforms have introduced tension into the auditor-client relationship, academic research has not adequately considered whether regulation-induced accountability demands modifies how auditors and managers interact to discuss, negotiate and resolve material accounting issues. This study contributes to the literature by investigating the impact of regulatory scrutiny on auditors' approach to resolving material accounting issues with managers and examining whether this impact is moderated by the interpersonal context (managers' commitment to their preferred accounting).

The results of an experiment to examine auditors' written responses to managers' accounting preferences indicate that, when regulatory scrutiny is low, auditors generate more arguments and are more likely to provide accounting recommendations in response to accounting preferences proposed by committed managers compared to the same preferences proposed by less committed managers. However, auditors are not significantly more committed to their own recommendations when rejected by less committed managers compared to committed managers. These results provide evidence that, in the absence of regulatory scrutiny, auditors reciprocate manager commitment by generating more supportive responses to accounting preferences proposed by less committed managers compared to committed managers. While prior accounting negotiation research has documented that reciprocity norms influence bargaining behaviour (Ng and Tan 2003; Sanchez et al. 2007; Hatfield et al. 2008), this study demonstrates that reciprocity also dictates auditors' interaction strategy which supports the Gibbins et al. (2008) finding that auditors are responsible for maintaining the auditor-client relationship.

Whereas auditors are influenced by reciprocity norms when regulatory scrutiny is low, the results provide evidence that accountability demands dominate reciprocity motivations when regulatory scrutiny is high. In particular, the results indicate that, as regulatory scrutiny increases, auditors generate fewer arguments and are less likely to provide accounting recommendations in response to accounting preferences proposed by committed managers but auditors generate more challenging arguments and are more likely to provide recommendations in response to the same preferences proposed by less committed managers. The results also demonstrate that, as regulatory scrutiny increases, auditors are less committed to their own recommendations when rejected by less committed managers but auditors are more committed to their own recommendations when rejected by committed managers. While it is not controversial that regulatory scrutiny introduces tension into the auditor-client relationship, the results demonstrate that regulatory scrutiny does not have a one-size-fits-all effect on auditors' interaction approach. When responding to committed managers' accounting preferences, auditors withhold arguments and recommendations to prevent these managers from exploiting shared information and developing counterarguments. In contrast, when responding to less committed managers' preferences, auditors generate more arguments and clearly promote recommendations to take advantage of managers' desire to develop justifiable positions. Therefore, the impact of regulatory scrutiny on auditors' interaction approach is contingent on managers' commitment to their accounting preferences, which suggests that the chilling effect documented by the financial press is not generalizable to all auditor-client relationships. In fact, as regulatory scrutiny increases, auditors are more willing to discuss material accounting issues with managers who are not committed to their accounting preferences.

This study contributes to understanding the role of the auditor-client relationship in the financial reporting process. Whereas prior research has documented that the type of auditor-client relationship influences auditors' approach to resolving material accounting issues with managers (Gibbins et al. 2008), this study focuses on only one feature of the auditor-client relationship (managers' commitment to their accounting preferences) and provides evidence that manager commitment affects not only auditors' interaction approach but also auditors' expectations regarding financial reporting outcomes. Given that the experiment did not provide participants an opportunity to develop a long-term relationship with the CFO, the results suggest that manager commitment is a key determinant in the development of different types of auditor-client relationships. Future research would benefit by considering whether manager commitment would influence auditors' interaction approach for long-term auditor-client relationships.

Along with considering the impact of different types of auditor-client relationships on auditors' interaction approach, this study contributes to understanding how auditors manage the auditor-client relationship. While Gibbins et al. (2008) find that managers determine the type of relationship they want with their auditor and auditors are responsible for managing the relationship, this research suggests that auditors are more concerned with satisfying accountability demands than managing the relationship when regulatory scrutiny is high. For example, the results provide evidence that auditors' responses to less committed managers' preferences are supportive when regulatory scrutiny is low, but auditors' responses are more adversarial when regulatory scrutiny is high which could motivate less committed managers to be less receptive to auditor consultation in future interactions. Hence, regulation-induced accountability demands appear to induce auditors to play a more active role in defining the auditor-client relationship.

Given that this study focuses on one accounting decision (revenue recognition) and two independent variables (Manager Commitment and Regulatory Scrutiny) additional research on auditors' approach to resolving material accounting issues with managers is necessary to further extend these findings. Other factors that may influence auditors' interaction approach include the following: (1) management's technical accounting knowledge; (2) audit committee involvement; (3) complexity of the accounting issue; and (4) the outcomes of past accounting discussions. For example, complex accounting issues are difficult to resolve because the reporting standards are ambiguously defined which places auditors at a disadvantage when attempting to persuade managers to adopt specific alternatives (Salterio and Koonce 1997; Nelson et al. 2002). To overcome this disadvantage, auditors may focus more attention on enhancing the strength of their arguments by collecting persuasive evidence (e.g. consulting technical accounting experts), gaining the support of important stakeholders (e.g. audit committee members) and carefully developing recommendations that are within managers' acceptability range. Future research could also consider how auditors discuss material accounting issues with other actors in the financial reporting process. Audit committee members are increasingly under pressure to become more involved in the financial reporting process as SOX requires auditors to report to the audit committee "all critical accounting policies and practices to be used" and "all alternative treatments of financial information within generally accepted accounting principles that have been discussed with management… and the treatment preferred by the registered public accounting firm" (s. 204). This requirement suggests that when auditors interact with managers to resolve material accounting issues, they not only have to manage the auditor-client relationship and satisfy regulation-induced accountability demands but they also need to anticipate future interactions with the audit committee. To investigate these potential interactions, future research could consider the factors that might influence how auditors communicate material accounting decisions that were the result of negotiations with managers. Some factors that could influence how auditors disclose material accounting decisions to the audit committee include the following: (1) audit committee characteristics (e.g. independence and financial expertise); (2) difficulty of the negotiation process; and (3) whether the auditor's or manager's position prevailed.

This study represents an initial investigation into the factors that influence how auditors construct narrative arguments to persuade managers to adopt preferred accounting policies. Future research could also examine other factors that influence the types of persuasive arguments generated by auditors and managers. For example, managers could attempt to convince auditors to adopt preferred reporting options by relying on their knowledge of the business, appealing to auditors' technical accounting expertise or by applying a combination of approaches. Depending on the route to persuasion selected, managers may focus on developing arguments that are based on interpretations of accounting standards (appealing to auditors' expertise) or arguments that are based on the economics of the transaction (relying on managers' knowledge). Along with investigating factors that influence the types of persuasive arguments generated, future research could consider the types of arguments (or combination of types) that are successful in compelling auditors and managers to modify their accounting preferences. This research would be relevant in understanding how persuasive communication can influence the adoption of financial reporting outcomes.

Table 1: Descriptive Statistics and ANOVA Results for the Number of Arguments

Panel A: Descriptive Statistics for Number of Arguments

			Manager Commitment		
			Low	**High**	**Average**
Regulatory Scrutiny	**Low**	Mean (s.d.)	2.43 (3.76)	5.13 (4.44)	**3.83 (4.28)**
		Sample Size	14	15	**29**
	High	Mean (s.d.)	5.07 (4.48)	3.00 (1.80)	**4.04 (3.51)**
		Sample Size	14	14	**28**
		Average	**3.75 (4.27)**	**4.10 (3.54)**	**3.93 (3.89)**
			28	**29**	**57**

Panel B: Univariate ANOVA Results for Number of Arguments

Dependent Variable: Number of Arguments

Factor	*df*	*Mean Square*	*F*	*p-value*
Manager Commitment	1	1.43	0.10	0.75
Regulatory Scrutiny	1	0.92	0.06	0.80
Scrutiny*Commitment	1	3.95	5.65	0.02
Error	53			

Notes:

- The number of arguments is measured as the total number of idea units generated by participants in their responses to the CFO's revenue recognition preference that are categorized as attempting dispute the CFO's preference, question the rationale for the CFO's preference or promote the adoption of less aggressive alternatives.
- Manager Commitment is the degree to which the CFO is committed to his preferred revenue recognition alternative before discussing the issue with the participant.
- Regulatory Scrutiny is the extent to which the client firm (MES) is subject to regulatory requirements.
- All reported p-values are two-tailed.

Table 2: Descriptive Statistics and ANOVA Results for the Likelihood of Recommending an Accounting Alternative

Panel A: Descriptive Statistics for Auditor Recommendation

Regulatory Scrutiny			Manager Commitment: Low	Manager Commitment: High	Manager Commitment: Average
	Low	Mean (s.d.)	0.43 (0.51)	0.80 (0.41)	**0.62 (0.49)**
		Sample Size	14	15	**29**
	High	Mean (s.d.)	0.71 (0.47)	0.50 (0.52)	**0.61 (0.50)**
		Sample Size	14	14	**28**
		Average	**0.57 (0.50)**	**0.66 (0.48)**	**0.61 (0.49)**
			28	**29**	**57**

Panel B: Univariate ANOVA Results for Auditor Recommendation

Dependent Variable: Auditor Recommendation

Factor	***df***	***Mean Square***	***F***	***p-value***
Manager Commitment	1	0.09	0.38	0.54
Regulatory Scrutiny	1	0.00	0.00	0.96
Scrutiny*Commitment	1	1.22	5.31	0.03
Error	53			

Notes:

- Auditor recommendation is measured as whether (or not) participants clearly promoted a revenue recognition alternative in their response to the CFO's revenue recognition preference.
- Manager Commitment is the degree to which the CFO is committed to his preferred revenue recognition alternative before discussing the issue with the participant.
- Regulatory Scrutiny is the extent to which the client firm (MES) is subject to regulatory requirements.
- All reported p-values are two-tailed.

Table 3: Descriptive Statistics and ANOVA Results for the Degree of Commitment to an Accounting Recommendation

Panel A: Descriptive Statistics for Auditor Commitment

Regulatory Scrutiny			Manager Commitment: Low	Manager Commitment: High	Average
	Low	Mean (s.d.)	0.08 (0.23)	0.33 (1.06)	**0.21 (0.77)**
		Sample Size	14	15	**29**
	High	Mean (s.d.)	0.63 (1.33)	0.04 (0.13)	**0.33 (0.84)**
		Sample Size	14	14	**28**
		Average	**0.36 (0.85)**	**0.19 (0.77)**	**0.27 (0.80)**
			28	**29**	**57**

Panel B: Univariate ANOVA Results for Auditor Commitment

Dependent Variable: Auditor Commitment

Factor	*df*	*Mean Square*	*F*	*p-value*
Manager Commitment	1	0.43	0.69	0.41
Regulatory Scrutiny	1	0.24	0.38	0.54
Scrutiny*Commitment	1	2.52	4.04	0.05
Error	53			

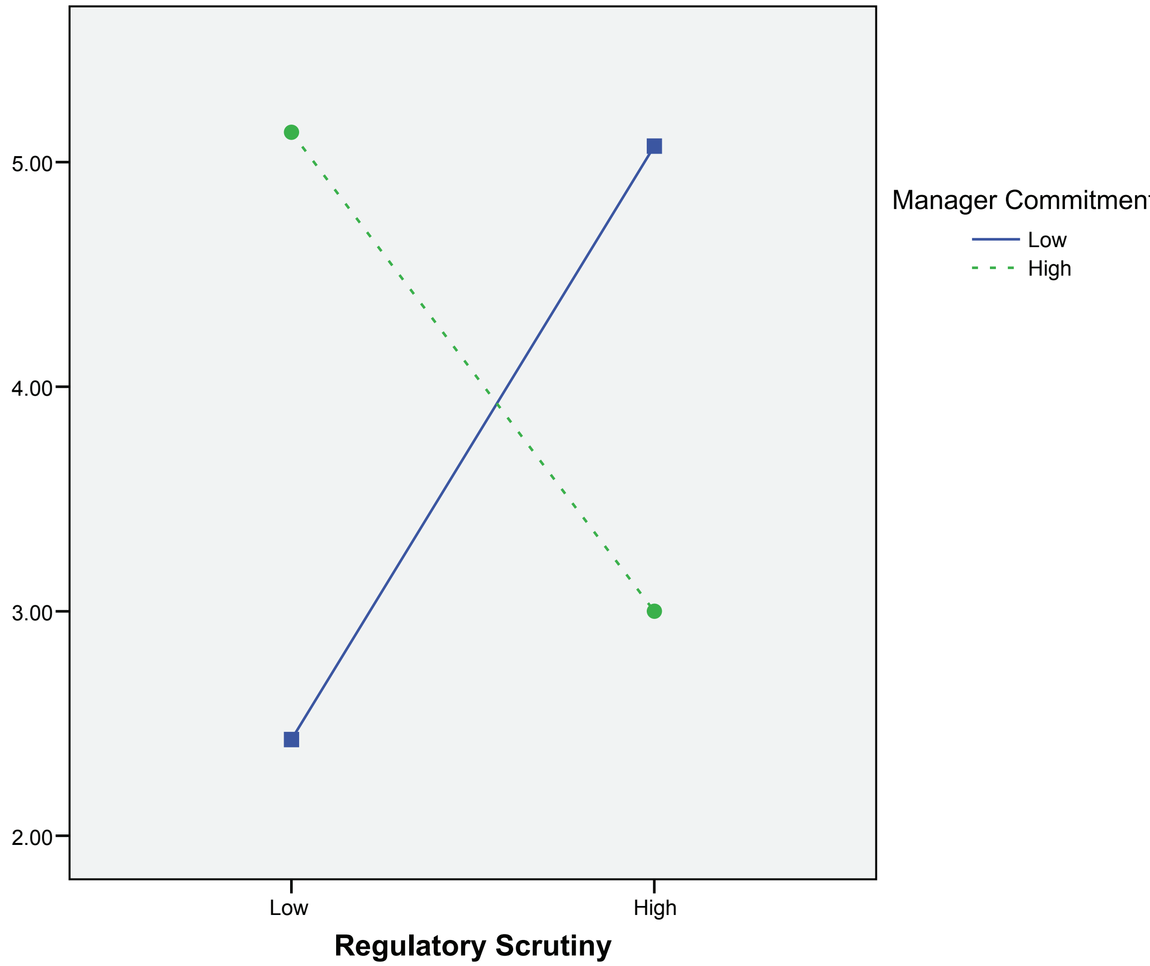
Notes:

- Auditor commitment is measured as the difference (in millions of dollars) between the amount of revenue participants recommended after submitting their response to the CFO and their prediction regarding the amount of revenue that would ultimately be recorded related to the contract after receiving a reply from the CFO indicating that MES has decided to maintain its revenue recognition preference.
- Manager Commitment is the degree to which the CFO is committed to his preferred revenue recognition alternative before discussing the issue with the participant.
- Regulatory Scrutiny is the extent to which the client firm (MES) is subject to regulatory requirements.
- All reported p-values are two-tailed.

Figure 1: Experiment Flow Chart

Step 1	Participants read the instructions and ethics information.
Step 2	Participants read the background information about the client firm and the government contract. The regulatory scrutiny manipulation is introduced in the background information.
Step 3	Participants are provided with a message from the CFO that describes his revenue recognition preference related to the contract. Participants are asked to read the message and a summary of potential revenue recognition alternatives. The manager commitment manipulation is introduced in the message from the CFO.
Step 4	Participants prepare a draft response to the CFO's revenue recognition preference.
Step 5	Participants enter (separate from their draft response) the amount of revenue that they would recommend to be recorded related to the contract.
Step 6	Participants respond to demographic questions while they wait for a reply to their response from the CFO.
Step 7	Participants read a reply from the CFO indicating that the client intends to maintain its revenue recognition preference.
Step 8	Participants enter the amount of revenue that they expect to be ultimately recorded related to the contract.
Step 9	Participants complete the study by responding to a debriefing questionnaire.

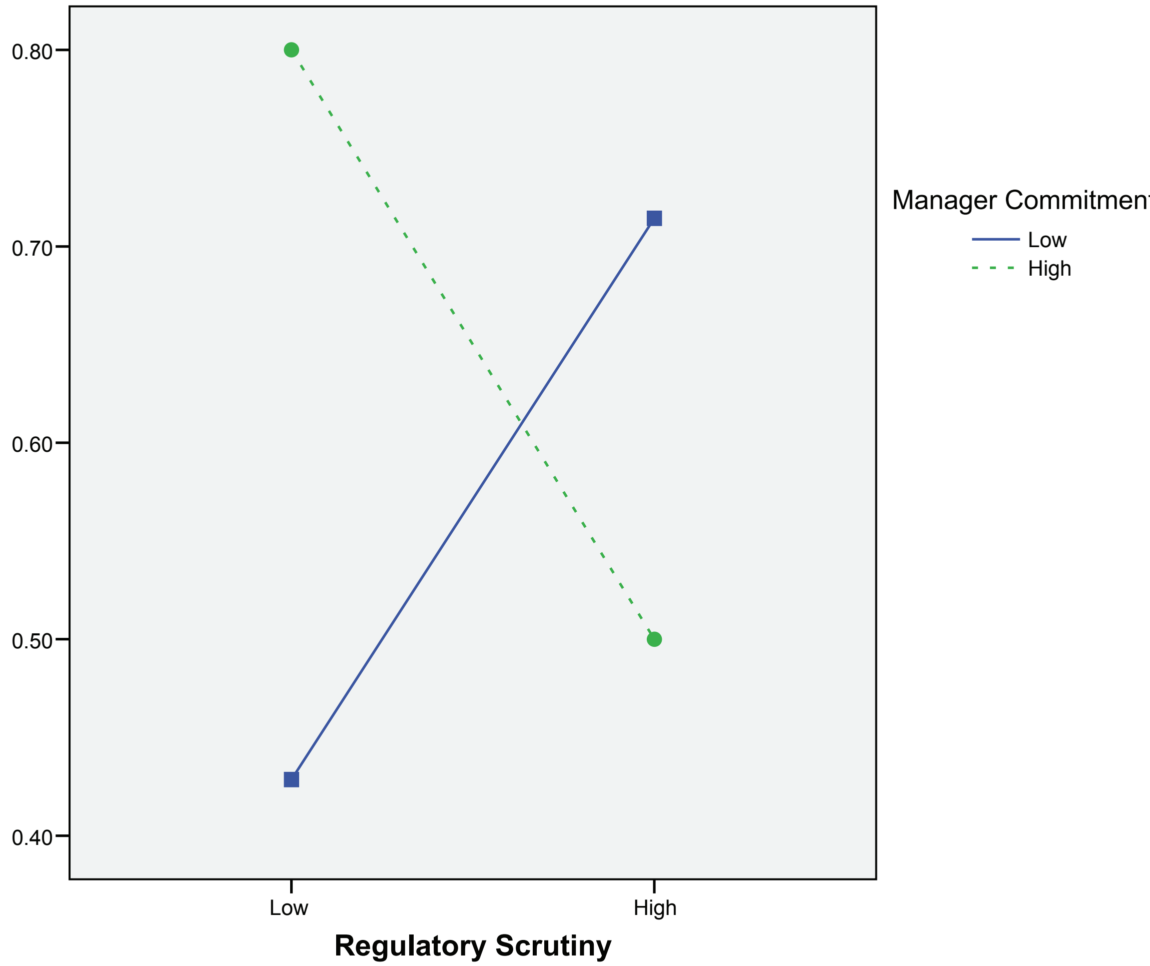
Figure 2: The Effects of Manager Commitment and Regulatory Scrutiny on the Number of Arguments



Notes:

- The number of arguments is measured as the total number of idea units generated by participants in their responses to the CFO's revenue recognition preference that are categorized as attempting dispute the CFO's preference, question the rationale for the CFO's preference or promote the adoption of less aggressive alternatives.
- Manager Commitment is the degree to which the CFO is committed to his preferred revenue recognition alternative before discussing the issue with the participant.
- Regulatory Scrutiny is the extent to which the client firm (MES) is subject to regulatory requirements.

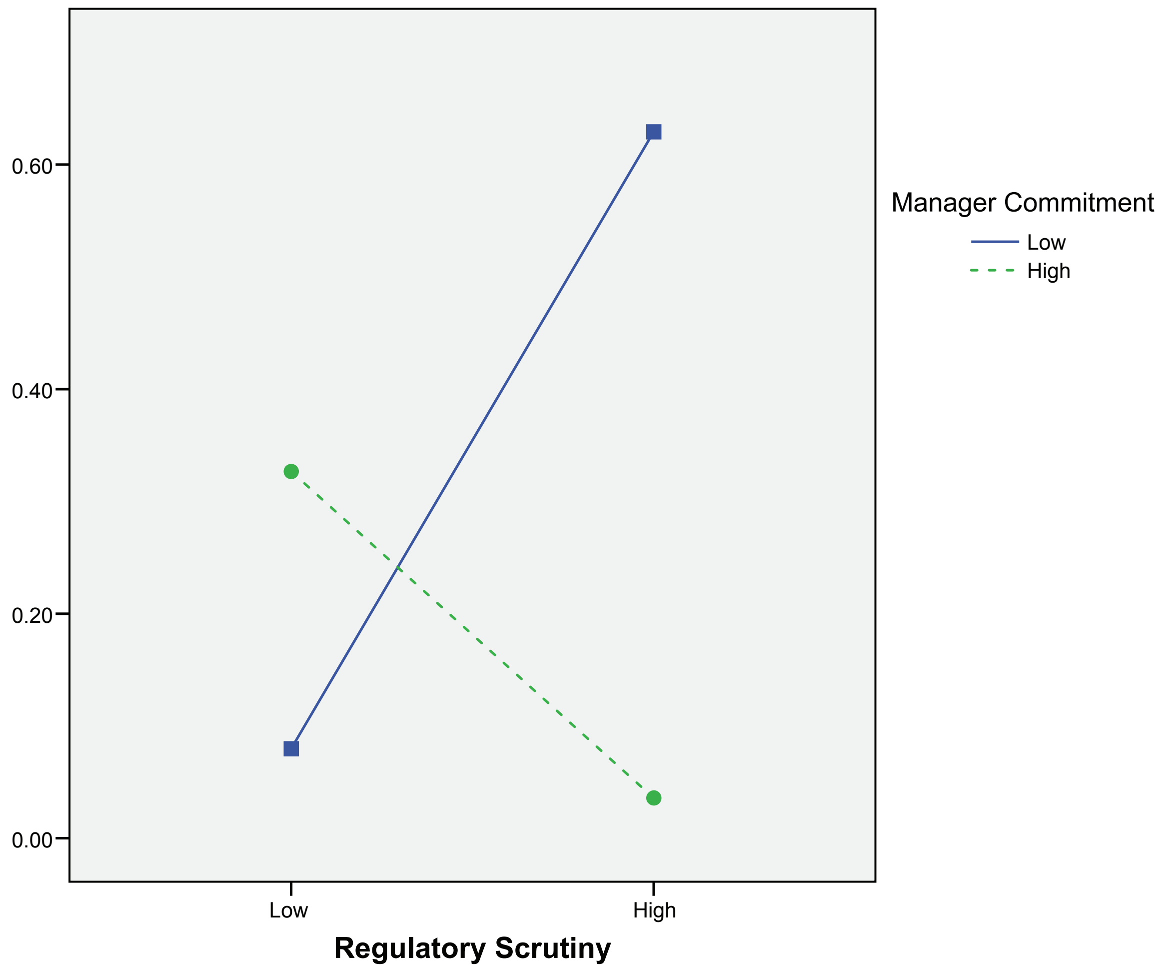
Figure 3: The Effects of Manager Commitment and Regulatory Scrutiny on the Likelihood of Recommending an Accounting Alternative



Notes:

- Auditor recommendation is measured as whether (or not) participants clearly promoted a revenue recognition alternative in their response to the CFO's revenue recognition preference.
- Manager Commitment is the degree to which the CFO is committed to his preferred revenue recognition alternative before discussing the issue with the participant.
- Regulatory Scrutiny is the extent to which the client firm (MES) is subject to regulatory requirements.

Figure 4: The Effects of Manager Commitment and Regulatory Scrutiny on the Degree of Commitment to an Accounting Recommendation



Notes:

- Auditor commitment is measured as the difference (in millions of dollars) between the amount of revenue participants recommended after submitting their response to the CFO and their prediction regarding the amount of revenue that would ultimately be recorded related to the contract after receiving a reply from the CFO indicating that MES has decided to maintain its revenue recognition preference.
- Manager Commitment is the degree to which the CFO is committed to his preferred revenue recognition alternative before discussing the issue with the participant.
- Regulatory Scrutiny is the extent to which the client firm (MES) is subject to regulatory requirements.

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Appendix A: The Research Instrument

WELCOME TO
"RESOLVING IMPORTANT ACCOUNTING JUDGMENTS"

A University of Alberta Research Project

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CLICK HERE TO BEGIN

**“RESOLVING IMPORTANT ACCOUNTING JUDGMENTS”
WILL BEGIN IN 5 SECONDS**

To ensure that your data is collected accurately, please do not use the back button or the refresh button while completing this study.

University of Alberta School of Business	Department of Accounting and MIS 3-20L Business Building School of Business University of Alberta Edmonton, Alberta T6G 2R6

THANK YOU FOR PARTICIPATING IN "RESOLVING IMPORTANT ACCOUNTING JUDGMENTS"

January 29, 2008

The purpose of this study is to examine how auditors resolve important accounting judgments with client management. Your professional experience makes you an ideal candidate to complete this study and your participation will provide valuable insights into this important process.

During this session you will read a business case that describes a company's financial situation and an accounting issue involving revenue recognition for a material government contract. After reading the business case you will be asked to draft your firm's response to the client's preferred revenue recognition treatment related to the contract. You will also be asked to answer some follow-up questions. This study will take approximately 45 minutes to complete.

Your participation is completely voluntary and you may withdraw at any time without any consequences. While we hope you will be able to answer all questions, you are free to decline to answer any or all questions. You are assumed to have given consent to participate in this study by responding to the client's preferred treatment and the follow-up questions.

No record will exist of your identity or your firm, and the results of the research will be reported only in aggregate form. All responses will be saved electronically, backed up on an external hard drive, and kept in locked storage. Any paper printouts of data will also be kept in locked storage and will be destroyed upon completion of the study. The electronic data will be kept for a period of five years post-analysis.

Only we and our research assistants will have access to the data during the study. The results of the analysis will form part of a graduate thesis in accounting, which will be a public document. Other researchers (upon specific request) may view the data later, but they will not know your identity (since we will not know it) and will not be permitted to publish individual responses.

If you would like further information about the study, such as the results, or have additional questions or concerns, please contact us, separately from your responses, or the School of Business Research Ethics Board at researchethicsboard@bus.ualberta.ca or 780-492-8443.

Thank you in advance for your valuable time!

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MEDICOPTER EMERGENCY SERVICES

Background:

Your client is Medicopter Emergency Services Inc. (TSX: MES), a publicly traded company that began operations in 1996 and went public in 2004. MES provides helicopter transportation services to the emergency medical services (EMS) industry and related services such as flight training and maintenance. MES generates revenue primarily through contracts with government and commercial organizations that require medium and heavy helicopters operated by highly trained personnel. Selected financial results for the year ended December 31, 2007 are provided below.

	For the Year Ended		
(In Canadian Dollars)	**Dec. 31, 2007***	**Dec. 31, 2006**	**Dec. 31, 2005**
OPERATING SUMMARY			
Revenue	$61,220,585	$48,503,260	$37,694,108
Operating Income	$15,917,352	$11,640,782	$8,669,645
Operating Income Margin	26%	24%	23%
Net Income	$7,321,982	$5,354,760	$3,988,037
FINANCIAL POSITION			
Total Assets	$109,322,473	$91,515,585	$83,764,684

* The 2007 draft figures include $6.5 million in revenue from a new government contract that is described later.

In May 2007, MES management signed a unique government contract that is expected to allow MES to continue its trend of strong financial results. If the contract is accounted for in the manner currently preferred by MES, 2007 earnings are expected to be $7.3 million (as shown above), which is a 36.7% increase over the prior year.

It is now January 2008, and you recently reviewed the MES engagement to determine how the audit and financial statement preparations were going. You found that your audit firm is about to conclude the audit fieldwork and MES has prepared the December 31, 2007 financial statements. Your review also indicates that MES has committed to a position on the material issue of revenue recognition for the new government contract and the CFO has presented the financial results to the CEO. Your accounting firm recently received a message from the CFO describing MES' revenue recognition position related to this contract, to which your firm has decided to respond.

Along with details of the MES engagement, your review also highlighted some important information about MES' reporting environment. As a publicly traded company, MES must follow public company regulatory requirements such as having an independent and financially literate audit committee. In addition, as a public company client, the MES audit is subject to inspection by the Canadian Public Accountability Board (CPAB). Therefore, any significant findings documented in the MES audit working papers (such as accounting for complex transactions) are accessible for CPAB review.

Your accounting firm has asked you to prepare a draft response to the message containing the CFO's revenue recognition position related to the government contract. As you prepare to draft a response to the CFO, you examine the information that you have collected to date, which includes additional details about the contract. In addition, you have a copy of the CFO's message and a summary of the revenue recognition alternatives considered by MES for the contract.

THE GOVERNMENT CONTRACT

On May 1, 2007, MES entered into a one-year $9.8 million contract with the Ambulance Service of Oregon (ASO). The contract includes four years of extension options which can be exercised by the ASO at the end of the first year. All indications are that the contract will be renewed. A popular business newspaper published the following article about the contract:

> **May 1, 2007**
>
> **Medicopter Awarded New Emergency Medical Services Contract in Oregon**
>
> Medicopter Emergency Services Inc. announced today that it has been awarded a multi-million dollar contract with the Ambulance Service of Oregon to provide emergency medical air transport and search and rescue services for the Greater Portland Metropolitan Region, including its surrounding municipalities and Mount Hood.
>
> The one-year contract, which has options for an additional four years, is the largest medical air transport contract ever awarded by the Ambulance Service of Oregon.

Specifics of the Contract:

This contract is unlike all other MES helicopter transportation contracts, which are either fixed-fee (i.e. independent of actual helicopter usage) or variable-fee (i.e. a function of actual helicopter usage). This contract is unique because MES wanted assurance that contractual revenues would at least cover the expected operating costs, so MES negotiated a variable-fee contract but with a minimum annual service fee.

The ASO has agreed to use or pay for a minimum of 2,990 total flight hours from May 2007 to April 2008 at a rate of $3,282 per flight hour, aggregating to $9,813,180. The costs of providing helicopter transportation services are $1,097 per flight hour, of which 75% are fixed and 25% are variable costs. MES is responsible for all operating costs to provide continuous service, as well as those costs directly attributable to actual flight time. Summary results from 2006 indicate that MES earned a 33% gross margin on prior fixed and variable-fee helicopter transportation contracts.

The ASO contract specifies separate hourly helicopter transportation rates of $4,580 for emergency medical transport (EMT) and $2,950 for search and rescue services (SAR). If actual helicopter usage billed at separate hourly rates exceeds the minimum contractual rate, the higher actual usage amounts will be paid to MES.

The contract is for the one year period from May 1, 2007 to April 30, 2008. As at MES’ December 31, 2007 year-end, the ASO has used 980 flight hours (716 EMT hours and 264 SAR hours).

THE MESSAGE FROM THE CFO

FROM: Robert Smith, CFO Medicopter
SUBJECT: Revenue Recognition for the Ambulance Service of Oregon Contract

Good Afternoon:

As you know, we were recently awarded a large emergency air transportation contract with the Ambulance Service of Oregon (ASO). This important contract is unlike any other MES contract, so I am providing you the following information to describe our revenue recognition position related to this contract.

After considering several potential revenue recognition alternatives, our position is to allocate the expected revenue evenly over the service period regardless of actual use which is consistent with MES' treatment of fixed-fee contracts. Under this method, the income statement for the year ending December 31, 2007 would include $6,542,120 in revenue related to the contract.

We selected this position because this is a take or pay contract, so the ASO is committed to the minimum 2,990 hours of usage. Furthermore, the ASO has not established a pattern of use or provided a timetable for when they will use the hours, which makes it reasonable to recognize revenue evenly over the life of the contract. Finally, EIC-141 allows revenue recognition on a straight-line basis when services are performed continuously over time, unless evidence suggests that the revenue is earned in a different pattern.

Although this contract is unlike any other MES contract, we remain confident that the straight-line method is appropriate because our research suggests that the ASO contract can be treated consistent with MES' treatment of fixed-fee contracts. Given that we have committed to a position related to the ASO contract, I decided to present the financial results to the CEO based on the straight-line method. As a result, we are reluctant to modify our position related to this contract, but I will read any observations you have about our position because this issue is important.

Sincerely,
Robert Smith

SUMMARY OF REVENUE RECOGNITION ALTERNATIVES

Summary of Ambulance Service of Oregon Contract Facts:

- 12 month contract of which 8 months have passed
  - Contract price = $9,813,180
  - Contract hours = 2,990
  - Average revenue/hr. = 9,813,180/2,990 = $3,282
- Actual hours used as of December 31 = 980
  - 716 EMT hours
  - 264 SAR hours
- Contract revenue per hour of usage
  - EMT hours = $4,580
  - SAR hours = $2,950
- Gross margin earned on prior contracts = 33%
- Total costs per hour of usage = $1,097
  - Fixed = 75% X $1,097 = $823
  - Variable = 25% X $1,097 = $274

Revenue Recognition Alternatives Considered by MES:

1. Average Rate Method

(1) Actual hours used	980
(2) Average revenue per hour	$3,282
Revenue Recognized (1) X (2)	**$3,216,360**

2. Gross Margin/Time Elapsed Method

Revenue Based on Gross Margin:

(1) Actual hours used	980
(2) Gross margin percentage	33%
(3) Total costs per hour of usage	$1,097
(4) Hourly rate based on usage (3) / [100%-(2)]	$1,637
(5) Gross Margin Revenue (1) X (4)	$1,604,567

Revenue Based on Time Elapsed:

(6) Total contract hours	2990
(7) Hourly rate based on usage	$1,637
(8) Total contract value	$9,813,180
(9) Contract revenue remaining (8) - [(6) X (7)]	$4,917,613
(10) Proportion of time elapsed	8 mos / 12 mos
(11) Time Elapsed Revenue (9) X (10)	$3,278,409
Revenue Recognized (5) + (11)	**$4,882,976**

3. Straight-Line Method (Method Preferred by CFO)

(1) Total contract value	$9,813,180

4. Usage Rate Method

Emergency Medical Transport Revenue:

(1) Actual hours used	716
(2) Revenue per hour	$4,580
(3) EMT Revenue (1) X (2)	$3,279,280

Search and Rescue Revenue:

(4) Actual hours used	264
(5) Revenue per hour	$2,950
(6) SAR Revenue (4) X (5)	$778,800
Revenue Recognized (3) + (6)	**$4,058,080**

5. Fixed/Variable Cost Method

Revenue Based on Fixed Costs:

(1) Percentage of fixed costs	75%
(2) Proportion of fixed costs incurred	8 mos / 12 mos
(3) Total contract value	$9,813,180
(4) Fixed Cost Revenue (1) X (2) X (3)	$4,906,590

Revenue Based on Variable Costs:

(5) Percentage of variable costs	25%
(6) Proportion of variable costs incurred	980 hrs / 2990 hrs
(7) Total contract value	$9,813,180
(8) Variable Cost Revenue (5) X (6) X (7)	$804,090

(2) Proportion of time elapsed	8 mos / 12 mos		
Revenue Recognized (1) X (2)	**$6,542,120**	**Revenue Recognized (4) + (8)**	**$5,710,680**

MAIN QUESTION: YOUR DRAFT RESPONSE TO THE CFO's MESSAGE

1. Based upon the information presented, please prepare a draft response to the CFO's revenue recognition position related to the Ambulance Service of Oregon contract.

(Remember: do not include your name in your draft response)

YOUR REVENUE RECOGNITION RECOMMENDATION

2. Based upon your response to the CFO, what is the amount of revenue that you would recommend to be recorded related to the Ambulance Service of Oregon contract in MES' 2007 financial statements?

Please indicate an amount from $0 (i.e. recognize no revenue related to the contract) to $9,813,180 (i.e. recognize all the revenue related to the contract). Any amount between $0 and $9,813,180 indicates that you would recommend the revenue related to the contract to be partially recognized.

ENTER AMOUNT HERE: **$ ________________________** (no commas or symbols)

Please briefly explain the rationale for the amount you recommended above:

____

____

THE CFO IS PREPARING A REPLY

Your firm sent a response to the CFO that essentially
followed the draft response that you prepared.

Please respond to the questions on the next page while the CFO prepares a reply.

Click Here to Continue

QUESTIONS ABOUT YOU AND YOUR PROFESSIONAL EXPERIENCE

1. How many years have you worked in assurance services? _____

2. How many years of public company audit experience do you have? _____

3. How many years of private company audit experience do you have? _____

4. What is your current position or job title (e.g. senior, manager, partner, etc.)? _____

5. How many years have you worked in your current position? _____

6. Gender: Male: _____ Female: _____

7. Please select your age:

Under 25 _____ 25 to 35 _____ 35 to 45 _____ 45 to 55 _____ 55 to 65 _____ Over 65 ____

8. How often do you participate in discussions of important accounting issues with your audit clients (e.g. the CFO)?

|---|---|---|---|---|---|---|---|---|---|

0 5 10

Never Very Often

9. How often do you help your firm to prepare for discussions of important accounting issues with your audit clients (e.g. the CFO)?

|---|---|---|---|---|---|---|---|---|---|

0 5 10

Never Very Often

THE CFO's REPLY IS READY

The CFO prepared a reply to your firm's response related to the Ambulance Service of Oregon contract, which was based on your draft response.

Your firm has forwarded the CFO's reply to you.

Click Here to Continue

[PROCEDURE NOTE: This screen and the first follow up question will be skipped if the participant recommended recognizing $6,542,120 or more in revenue related to the ASO contract. Any amount equal to or greater than $6,542,120 indicates that the participant agrees with the CFO.]

REPLY FROM THE CFO

FROM: Robert Smith, CFO Medicopter
SUBJECT: RE: Revenue Recognition for the Ambulance Service of Oregon Contract

Good Afternoon:

Thank you for your response to our revenue recognition position related to the Ambulance Service of Oregon (ASO) contract.

I have carefully considered your response, but after additional consideration of this matter, we have decided to maintain our revenue recognition position. Given the importance of this issue, I would like to briefly explain the rationale for maintaining our position.

We believe the straight-line method is appropriate for the following reasons:

(1) This is a take or pay contract, so the ASO is committed to the minimum 2,990 hours of usage.
(2) EIC-141 allows revenue recognition on a straight-line basis when services are performed continuously over time, unless evidence suggests that the revenue is earned in a different pattern.
(3) The ASO has not established a pattern of use or provided a timetable for when they will use the hours.
(4) This method is consistent with our treatment of fixed-fee contracts.
(5) Any other method would defer contract revenue which would generate unrealistic financial results next year.
(6) We believe that other companies in this industry also use this method.

Based on our conclusions, we included $6,542,120 in revenue related to the ASO contract on the 2007 financial statements. I discussed the financial results based on our conclusions with the CEO earlier this week, so I consider this issue resolved. Please contact me if there are any other items you would like to discuss related to the 2007 financial statements.

Sincerely,
Robert Smith

YOUR REVENUE RECOGNITION BELIEF

1. In light of the CFO's reply to your response, how much revenue do you believe will ultimately be recorded related to the Ambulance Service of Oregon (ASO) contract in MES' 2007 financial statements?

Please indicate an amount from $0 (i.e. recognize no revenue related to the contract) to $9,813,180 (i.e. recognize all the revenue related to the contract). Any amount between $0 and $9,813,180 indicates that you believe the revenue related to the contract would be partially recognized.

ENTER AMOUNT HERE: $ ________________________ (no commas or symbols)

Please briefly explain the rationale for your belief above:

____

____

FOLLOW-UP QUESTIONS

Please respond to the following questions by clicking on the related scale.

1. Do you believe that the revenue recognition decision related to the ASO contract is material to MES' financial statements?

|---|---|---|---|---|---|---|---|---|---|

0 5 10

Definitely Not Material — Definitely Material

2. What type of company is MES?

A Publicly Traded Company: _____
A Privately Held Company: _____
A Not-For-Profit Company: _____

3. How would you characterize the revenue recognition alternative preferred by the CFO?

|---|---|---|---|---|---|---|---|---|---|

0 5 10

Very Conservative — Very Aggressive

4. Based on the information provided, how would you rate the CFO's technical accounting knowledge?

|---|---|---|---|---|---|---|---|---|---|

0 5 10

Very Weak Knowledge — Very Strong Knowledge

5. Based on the information provided, how would you rate the degree of regulatory scrutiny experienced by the MES audit?

|---|---|---|---|---|---|---|---|---|---|

0 5 10

Very High Scrutiny — Very Low Scrutiny

FOLLOW-UP QUESTIONS

Please respond to the following questions by clicking on the related scale.

6. Assume that the CFO's preferred revenue recognition alternative was ultimately adopted in MES' 2007 financial statements. How "comfortable" would you be with this final accounting for the ASO contract?

|---|---|---|---|---|---|---|---|---|---|
0 5 10

Very Uncomfortable — Very Comfortable

7. Did the CFO provide you with enough information to adequately respond to his revenue recognition preference?

|---|---|---|---|---|---|---|---|---|---|
0 5 10

Definitely Not Enough Information — Definitely Enough Information

8. Do you believe that the MES audit working papers are accessible by the Canadian Public Accountability Board (CPAB) for review?

|---|---|---|---|---|---|---|---|---|---|
0 5 10

Definitely Not Accessible — Definitely Accessible

9. How would you characterize your firm's relationship with the CFO?

|---|---|---|---|---|---|---|---|---|---|
0 5 10

Very Weak — Very Strong

10. Do you believe that the CFO was committed to his preferred revenue recognition alternative before you prepared your firm's draft response to the CFO's message?

|---|---|---|---|---|---|---|---|---|---|
0 5 10

Definitely Not Committed — Definitely Committed

FOLLOW-UP QUESTIONS

Please respond to the following questions by clicking on the related scale.

11. To what extent would you have to discuss the revenue recognition decision with the CFO before coming to an agreement?

|- - -|- - -|- - -|- - -|- - -|- - -|- - -|- - -|- - -|- - -|

0 5 10

Very Little Discussion

Very Extensive Discussion

12. How difficult would it be for you to come to an agreement with the CFO on the revenue recognition decision?

|- - -|- - -|- - -|- - -|- - -|- - -|- - -|- - -|- - -|- - -|

0 5 10

Very Easy

Very Difficult

13. How would you rate the persuasiveness of your draft response to the CFO's revenue recognition preference?

|- - -|- - -|- - -|- - -|- - -|- - -|- - -|- - -|- - -|- - -|

0 5 10

Not Very Persuasive

Very Persuasive

Please rate the extent to which you agree or disagree with each of the following statements by clicking on the related scale.

14. Recent changes in financial reporting regulation have influenced the way I discuss important accounting issues my client (e.g. the CFO).

|- - -|- - -|- - -|- - -|- - -|- - -|- - -|- - -|- - -|- - -|

0 5 10

Completely Disagree

Completely Agree

15. Discussing important accounting issues with my client (e.g. the CFO) improves my knowledge of the client business.

|---|---|---|---|---|---|---|---|---|---|---|

0 5 10

Completely Disagree — Completely Agree

FOLLOW-UP QUESTIONS

The following are five potential ways in which MES could account for the ASO contract. Please rate the appropriateness of each of these methods by clicking on the related scale. If you developed another method, please fill it in and also rate its appropriateness.

16. The Straight-Line Method (Method Preferred by CFO):

(1) Total contract value	$9,813,180
(2) Proportion of time elapsed	8 mos / 12 mos
Revenue Recognized (1) X (2)	**$6,542,120**

|---|---|---|---|---|---|---|---|---|---|---|
0 5 10

Not At All Appropriate

Completely Appropriate

Please briefly explain the rationale for your response above:

____

____

17. The Usage Rate Method:

Emergency Medical Transport Revenue:	
(1) Actual hours used	716
(2) Revenue per hour	$4,580
(3) EMT Revenue (1) X (2)	$3,279,280
Search and Rescue Revenue:	
(4) Actual hours used	264
(5) Revenue per hour	$2,950
(6) SAR Revenue (4) X (5)	$778,800
Revenue Recognized (3) + (6)	**$4,058,080**

|---|---|---|---|---|---|---|---|---|---|---|
0 5 10

Not At All Appropriate

Completely Appropriate

Please briefly explain the rationale for your response above:

____

____

18. The Average Rate Method:

(1) Actual hours used	980
(2) Average revenue per hour	$3,282
Revenue Recognized (1) X (2)	**$3,216,360**

|---|---|---|---|---|---|---|---|---|---|---|
0 5 10

Not At All Appropriate

Completely Appropriate

Please briefly explain the rationale for your response above:

____

____

19. The Fixed/Variable Cost Method:

Revenue Based on Fixed Costs:	
(1) Percentage of fixed costs	75%
(2) Proportion of fixed costs incurred	8 mos / 12 mos
(3) Total contract value	$9,813,180
(4) Fixed Cost Revenue (1) X (2) X (3)	$4,906,590
Revenue Based on Variable Costs:	
(5) Percentage of variable costs	25%
(6) Proportion of variable costs incurred	980 hrs / 2990 hrs
(7) Total contract value	$9,813,180
(8) Variable Cost Revenue (5) X (6) X (7)	$804,090
Revenue Recognized (4) + (8)	**$5,710,680**

|---|---|---|---|---|---|---|---|---|---|---|

0 5 10

Not At All Appropriate — Completely Appropriate

Please briefly explain the rationale for your response above:

____

____

20. The Gross Margin/Time Elapsed Method:

Revenue Based on Gross Margin:	
(1) Actual hours used	980
(2) Gross margin percentage	33%
(3) Total costs per hour of usage	$1,097
(4) Hourly rate based on usage (3) / [100%-(2)]	$1,637
(5) Gross Margin Revenue (1) X (4)	$1,604,567
Revenue Based on Time Elapsed:	
(6) Total contract hours	2990
(7) Hourly rate based on usage	$1,637
(8) Total contract value	$9,813,180
(9) Contract revenue remaining (8) - [(6) X (7)]	$4,917,613
(10) Proportion of time elapsed	8 mos / 12 mos
(11) Time Elapsed Revenue (9) X (10)	$3,278,409
Revenue Recognized (4) + (8)	**$4,882,976**

|---|---|---|---|---|---|---|---|---|---|

0 5 10

Not At All Appropriate — Completely Appropriate

Please briefly explain the rationale for your response above:

21. Other Method (optional):

Briefly describe any other method that you developed and the rationale for your response below:

____

____

|---|---|---|---|---|---|---|---|---|---|

0 5 10

Not At All Appropriate — Completely Appropriate

BUSINESS CASE QUESTIONS

Please indicate your response to the questions below with a slash (/) on the scale.

1. How realistic was the Medicopter Emergency Services (MES) business case?

|---|---|---|---|---|---|---|---|---|---|
0 5 10
Very Unrealistic — Very Realistic

2. How understandable was the MES business case?

|---|---|---|---|---|---|---|---|---|---|
0 5 10
Not Very Understandable — Very Understandable

3. How difficult was the task of preparing your firm's draft response to the CFO's revenue recognition preference in the MES business case?

|---|---|---|---|---|---|---|---|---|---|
0 5 10
Very Easy — Very Difficult

4. Did you refer to any information other than the MES business case while preparing your firm's draft response to the CFO's revenue recognition preference?

Yes, I did refer to other information: _____
No, I did not refer to other information: _____

If you answered yes, please list any information you referred to other than the MES business case:

____

____

-

THANK YOU FOR PARTICIPATING IN
"RESOLVING IMPORTANT ACCOUNTING ISSUES"

Thank you for completing this study. Please provide us with any further questions, comments or suggestions you may have regarding this study or the information contained within the business case. Also, if you would like further details about this study or you would like to participate in an upcoming study, please email us at pomeroy@ualberta.ca.

____

____

____

Click Here to End the Study

“RESOLVING IMPORTANT ACCOUNTING ISSUES”
HAS NOW ENDED

THANK YOU FOR PARTICIPATING
(please close this window)

Appendix B: Summary of Experimental Manipulations

Regulatory Scrutiny – Excerpts from the Background Information

[*Low Scrutiny*] Your client is Medicopter Emergency Services Inc., **a privately held company** that began operations in 1996 and has no intention of going public. MES provides helicopter transportation services to the emergency medical services (EMS) industry and related services such as flight training and maintenance. MES generates revenue primarily through contracts with government and commercial organizations that require medium and heavy helicopters operated by highly trained personnel.

[*High Scrutiny*] Your client is Medicopter Emergency Services Inc. (TSX: MES), **a publicly traded company** that began operations in 1996 and went public in 2004. MES provides helicopter transportation services to the emergency medical services (EMS) industry and related services such as flight training and maintenance. MES generates revenue primarily through contracts with government and commercial organizations that require medium and heavy helicopters operated by highly trained personnel.

[*Low Scrutiny*] As a privately held company, **MES is not responsible for following public company regulatory requirements** but MES still voluntarily adopts best practices such as having an independent and financially literate audit committee. In addition, as a private company client, **the MES audit is not subject to inspection** by the Canadian Public Accountability Board (CPAB). Therefore, any significant findings documented in the MES audit working papers (such as accounting for complex transactions) are not accessible for CPAB review.

[*High Scrutiny*] As a publicly traded company, **MES must follow public company regulatory requirements** such as having an independent and financially literate audit committee. In addition, as a public company client, **the MES audit is subject to inspection** by the Canadian Public Accountability Board (CPAB). Therefore, any significant findings documented in the MES audit working papers (such as accounting for complex transactions) are accessible for CPAB review.

Manager Commitment – Excerpts from the CFO's Message

[*Low Commitment*] As you know, we were recently awarded a large emergency air transportation contract from the Ambulance Service of Oregon (ASO). This important contract is unlike any other MES contract, so I am providing you the following information **to describe our current thinking on revenue recognition** related to this contract and to invite you to respond.

[*High Commitment*] As you know, we were recently awarded a large emergency air transportation contract with the Ambulance Service of Oregon (ASO). This important contract is unlike any other MES contract, so I am providing you the following information **to describe our revenue recognition position** related to this contract.

[*Low Commitment*] After considering several potential revenue recognition alternatives, **our current thinking** is to allocate the expected revenue evenly over the service period regardless of actual use which is consistent with MES' treatment of fixed-fee contracts. Under this method, the income statement for the year ending December 31, 2007 would include $6,542,120 in revenue related to the contract.

We tentatively prefer this method because this is a take or pay contract, so the ASO is committed to the minimum 2,990 hours of usage. Furthermore, the ASO has not established a pattern of use or provided a timetable for when they will use the hours, which makes it reasonable to recognize revenue evenly over the life of the contract.

[*High Commitment*] After considering several potential revenue recognition alternatives, **our position** is to allocate the expected revenue evenly over the service period regardless of actual use which is consistent with MES' treatment of fixed-fee contracts. Under this method, the income statement for the year ending December 31, 2007 would include $6,542,120 in revenue related to the contract.

We selected this position because this is a take or pay contract, so the ASO is committed to the minimum 2,990 hours of usage. Furthermore, the ASO has not established a pattern of use or provided a timetable for when they will use the hours, which makes it reasonable to recognize revenue evenly over the life of the contract.

[*Low Commitment*] Although our research suggests that the ASO contract can be treated consistent with MES' treatment of fixed-fee contracts, **we remain uncertain as to whether the straight-line method is appropriate** because this contract is unlike any other MES contract. Given that **we have not yet committed to a position** related to the ASO contract, I decided not to present the financial results to the CEO based on the straight-line method until we have considered this issue further. As a result, **we are willing to modify our current thinking** related to this contract, so I invite any observations you have about our current thinking on this important issue.

[*High Commitment*] Although this contract is unlike any other MES contract, **we remain confident that the straight-line method is appropriate** because our research suggests that the ASO contract can be treated consistent with MES' treatment of fixed-fee contracts. Given that **we have committed to a position** related to the ASO contract, I decided to present the financial results to the CEO based on the straight-line method. As a result, **we are reluctant to modify our position** related to this contract, but I will read any observations you have about our position because this issue is important.

Manager Commitment – Excerpts from the CFO's Reply

[*Low Commitment*] Thank you for your response to **our current thinking on revenue recognition** related to the Ambulance Service of Oregon (ASO) contract.

[*High Commitment*] Thank you for your response to **our revenue recognition position** related to the Ambulance Service of Oregon (ASO) contract.

[*Low Commitment*] I have carefully considered your response, and after additional consideration of this matter, **we still believe that our current thinking on revenue recognition is appropriate**. Given the importance of this issue, I would like to briefly explain the rationale for maintaining our current thinking.

[*High Commitment*] I have carefully considered your response, but after additional consideration of this matter, **we have decided to maintain our revenue recognition position**. Given the importance of this issue, I would like to briefly explain the rationale for maintaining our position.

[*Low Commitment*] Based on our conclusions, we included $6,542,120 in revenue related to the ASO contract on the 2007 financial statements. **I planned to discuss the financial results based on our conclusions with the CEO later this week, but I decided to tentatively postpone that meeting until this issue is resolved**. Please contact me if you would like to discuss this issue further.

[*High Commitment*] Based on our conclusions, we included $6,542,120 in revenue related to the ASO contract on the 2007 financial statements. **I discussed the financial results based on our conclusions with the CEO earlier this week, so I consider this issue resolved**. Please contact me if there are any other items you would like to discuss related to the 2007 financial statements.

Appendix C: Additional Details about the Internet-Based Administration

This study was administered using an Internet-based experiment to obtain access to difficult-to-reach participants. The experiment required participation from highly experienced auditors who are not available during business hours and not available in large numbers at any given geographic location, so the ideal approach was to administer the experiment in a manner that had unlimited geographic reach, could be accessed at any time and provided experienced auditors with a convenient option to participate.

The Internet-based experiment was developed with ColdFusion (CFML) which is a software language used for creating dynamically-generated web sites. CFML is useful in Internet-based experiments because it is capable of dynamically displaying information (e.g. words, numbers, etc.) on a webpage based on randomly assigned experimental conditions. The dynamic content in this study is the wording of the regulatory scrutiny and manager commitment manipulations, so the information that participants viewed on each webpage was determined by their randomly assigned experimental condition and dynamically generated by CFML.

The Internet-based experiment was designed with the following features:

1. Data was collected electronically and recorded to a Microsoft Access database which precludes the potential for data entry error.
2. Participant responses were recorded at every stage of the experiment which allowed the collection of partial data for participants who started but did not complete the experiment.

3. The Internet Protocol (IP) address for each participant was recorded to verify whether the experiment was accessed multiple times by the same participant.
4. Time data was collected which provided an opportunity to determine how long participants took to complete each stage of the experiment.
5. Data was collected on the number of times that participants viewed the case materials which provided an opportunity to determine how extensively each participant analyzed the case information.

The Internet-based experiment was pre-tested with practicing auditors, faculty members and graduate students. Pre-test participants were asked to carefully read the instructions and case materials to identify any typos or sections that were difficult to understand. Pre-test participants were also asked to test the stability of the Internet-based experiment by attempting to generate an error (e.g. use the back and forward buttons, enter letters instead of numbers, move to the next stage of the experiment without answering questions, etc.). Feedback from the pre-test was used to make minor improvements to the presentation, functionality and stability of the Internet-based experiment.

After developing and testing the Internet-based experiment, senior audit partners from the Big 4 accounting firms and two regional firms were contacted by phone to assist with recruiting potential participants. Audit partner contacts who were interested in the study were sent an introductory letter via email that provided additional information about the study (Appendix D) and included a recruitment letter to be distributed to potential participants (Appendix E). After reading the introductory letter, the audit partner contacts compiled an email list of potential participants and sent the recruitment letter to the email list. Potential participants could access the experiment by opening the email and clicking on a hyperlink that was included in the text of the email message. Clicking on the hyperlink opened a new browser window that contained the Internet-based experiment.

After sending the recruitment letter to the email list, audit partner contacts were sent a box of gift pens to distribute to potential participants as a thank-you for considering the study. Each gift pen cost $15 and was embossed with a University of Alberta logo. Potential participants were not required to complete the experiment to receive a gift pen and the gift pens were the only reward for participating in the study.

Potential participants received their gift pens, on average, one week after the audit partner contacts sent out the recruitment letter. The gift pens served as reminder to potential participants that they have been invited to participate in the study and the audit partner contacts emailed a second reminder to potential participants, on average, one week after sending the gift pens.

Appendix D: Introductory Letter for Senior Audit Partner Contacts

Dear (Contact Person's Name):

We are conducting a research project aimed at examining the process by which audit professionals resolve important accounting judgments with client management. To explore this process, we would like to ask for your assistance in encouraging your colleagues to participate in a brief online questionnaire.

We are examining this process because although auditor-client relations are central to professional work, little information is available to accounting researchers and teachers about the way the relationship works, in particular, about the way important accounting judgments are made.

We realize how busy you and your colleagues are, so to ensure you that the time they spend on this study is used effectively, we have thoroughly tested the research materials and focused them so that it can be completed anywhere with an Internet connection in 45 minutes at http://research.bus.ualberta.ca/pomeroy. Participation involves reading a short business case about revenue recognition for a material government contract, and then answering a brief questionnaire that involves responding to the client's preferred revenue recognition treatment.

We believe that this study will provide an opportunity for your colleagues to apply their expertise to a realistic and relevant accounting issue. In addition, as a gesture of our appreciation for participating in this study, we will provide a gift from the School of Business to be distributed to potential participants as an advance thank-you.

If you are interested in assisting us, please contact us by phone or email and we will send you an introductory letter which describes the study to potential participants. We will also mail additional copies of the introductory letter and the thank-you gifts for distribution to potential participants. If you have any concerns about assisting us with this study please contact the School of Business Research Ethics Board at researchethicsboard@bus.ualberta.ca or 780-492-8443.

Thank you in advance for your interest in this project. We think this study will make a strong contribution to accounting research and to practice.

Yours sincerely,

Michael Gibbins, PhD, FCA
Winspear Professor of Professional Accounting
University of Alberta
michael.gibbins@ualberta.ca
780-492-2718

Bradley Pomeroy, MSc
PhD Candidate in Accounting
University of Alberta
pomeroy@ualberta.ca
780-432-4314

Appendix E: Recruitment Letter for Potential Participants

Dear (Potential Participant's Name):

We invite you to participate in a study aimed at examining the process by which audit professionals resolve important accounting judgments with client management. Your professional experience makes you an ideal candidate to provide insights into this important process. We would be grateful for your assistance.

We seek your participation because although auditor-client relations are central to professional work, little information is available to accounting researchers and teachers about the way the relationship works, in particular, about the way important accounting judgments are made. As a professional with strong auditing experience, you can provide invaluable input.

We realize how busy you are. To assure you that the time you spend on this study is used effectively, we have thoroughly tested the research materials and focused them so that you can complete the study anywhere with an Internet connection in 45 minutes at http://research.bus.ualberta.ca/pomeroy. Participation involves reading a short business case about revenue recognition for a material government contract, and then answering a brief questionnaire that involves responding to the client's preferred revenue recognition treatment. Your responses and your firm will be entirely anonymous, including to us, and you may decline to answer any questions you do not wish to answer. You can participate online, so your firm will not know if you responded or what you said, and all responses will be grouped for analysis.

As a gesture of our appreciation for your participation we are providing a gift from the School of Business to be distributed to potential participants as an advance thank-you.

We hope you will assist us, and we repeat that participation is voluntary and anonymous. Please visit http://research.bus.ualberta.ca/pomeroy today to access the online questionnaire. If you have any concerns about participating in this study please contact the School of Business Research Ethics Board at researchethicsboard@bus.ualberta.ca or 780-492-8443.

Thank you in advance for your interest in this project.

Yours sincerely,

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Appendix F: The Coding Instructions

INSTRUCTIONS FOR INDEPENDENT CODERS

The data to be coded in this study are the auditor's (the participant) response to the CFO's revenue recognition preference. The purpose of this document is to provide detailed guidance on the variables to be coded and the procedures to follow. In preparation for this task, you have been provided the research materials to gain an understanding of experimental task and the participant experience. To further prepare for the coding task, this document contains (1) background information about the experiment; (2) the list of variables to be coded from the data; (3) the coding protocol; and (4) a detailed example.

BACKGROUND INFORMATION ABOUT THE EXPERIMENT

Participants are informed that their client is Medical Emergency Services Ltd. (MES), a helicopter transportation company. In the background information, participants learn that MES has signed a one-year government contract to provide emergency medical transportation and search and rescue services that will allow the company to continue its trend of strong financial results. The contract is material and unlike any of the company's other helicopter transportation contracts, so revenue recognition is an important issue.

After learning about the contract, participants are asked by their accounting firm to draft a response to a message sent by MES' CFO. In the message, the CFO explains his current revenue recognition preference related to the contract and indicates that MES prefers to recognize a large portion of the total contract revenue in the current year, which is called the straight-line method. Participants are then asked to draft their accounting firm's response to the CFO's preference on the amount of revenue to record related to the contract in the current year.

Along with the message from MES' CFO, participants are presented with additional details about the contract and a summary of the following five revenue recognition alternatives considered by MES to account for the contract:

1. Usage Rate Method
2. Average Rate Method
3. Gross Margin/Time Elapsed Method
4. Fixed/Variable Cost Method
5. Straight-line Method

The revenue recognition issue is complex, as contract revenue could be recorded using any of the five available alternatives, which would result in recording anywhere from $3,216,360 to $6,542,120 in revenue related to the contract (these differences are material). After reading the case materials participants are asked the following open-ended question:

"Based upon the information presented, please prepare a draft response to the CFO's revenue recognition preference related to the Ambulance Service of Oregon contract."

LIST OF VARIABLES TO BE CODED

The following variables are to be coded from each participant's written response to the CFO's revenue recognition preference:

1. Idea units generated in response to the CFO's revenue recognition preference.

   Each idea unit identified will be allocated to one of the following 19 categories:

   POSITION STATEMENTS:

   a. Arguments against the CFO's revenue recognition preference.
   b. Arguments for the CFO's revenue recognition preference.
   c. Arguments against any revenue recognition alternative other than the CFO's revenue recognition preference.
   d. Arguments for any revenue recognition alternative other than the CFO's revenue recognition preference.

   POSITION-SUPPORTING STATEMENTS:

   e. Statements supporting any arguments against the CFO's revenue recognition preference.
   f. Statements supporting any arguments for the CFO's revenue recognition preference.
   g. Statements supporting any arguments against revenue recognition alternatives other than the CFO's revenue recognition preference.
   h. Statements supporting any arguments for revenue recognition alternatives other than the CFO's revenue recognition preference.

   RECOMMENDATION & SUGGESTION STATEMENTS:

   i. Requests for additional information from the CFO to support or justify the CFO's revenue recognition preference.
   j. Suggestions generated for the CFO to consider without supporting or recommending any specific revenue recognition alternative.
   k. Statements that explicitly recommend a particular course of action to resolve the revenue recognition issue.

   NEUTRAL STATEMENTS:

   l. Statements that refer to accounting standards without supporting or recommending any specific revenue recognition alternative.
   m. Requests to meet again to discuss the revenue recognition issue.
   n. Comments that summarize the case facts.

o. Assumptions the participant generates about the case facts.
p. Comments that describe the procedures that the participant followed in preparing a response to the CFO's revenue recognition preference.
q. Opening and closing statements.
r. Statements that are directed to or intended for the researcher.
s. Other comments or statements generated by the participant.

Code the following variables separately after completing the idea unit coding:

2. The number of revenue recognition alternatives discussed, other than the CFO's revenue recognition preference.
3. Summarize any other comments or statements generated for the CFO.
4. Summarize any recommendations generated for the CFO to resolve the revenue recognition issue.

Code the following variable before moving on to the next participant:

5. An overall evaluation of the effectiveness of the participant's response to the CFO's revenue recognition preference.

DESCRIPTION OF EACH VARIABLE TO BE CODED

1. Idea units generated in response to the CFO's revenue recognition preference.

An idea unit is a segment of written discourse that communicates a distinct and discrete perception, evaluation, procedure or fact. Idea units are not defined by the length or structure of the sentence because multiple meaningful ideas can be conveyed within a single sentence. Recall that participants were asked to prepare a *draft* response, so some responses may include sentence fragments (e.g. "Standards unclear"). Sentence fragments are to be coded using the same procedure as complete sentences.

The following are examples of sentences that contain multiple idea units:

1. "The straight line method is not appropriate because the contract has a variable component."

> The preceding sentence contains two idea units:
>
> "The straight line method is not appropriate…" is an independent clause (a complete thought) which represents an argument against the CFO's revenue recognition preference.
>
> "… because the contract has a variable component" is a dependent clause (an incomplete thought) which represents a statement that supports an argument against the CFO's revenue recognition preference. This idea unit is joined to the first idea unit by a subordinating conjunction (*because*).
>
> Both independent and dependent clauses represent idea units. In addition, all independent and dependent clauses that are joined by a subordinating conjunction (e.g. *after, although, if, unless, so that, because, before, until, while)* represent idea units.

2. "We propose that you record revenue based on the services provided and recognize actual costs incurred to date."

> The preceding sentence contains two idea units:
>
> "We propose that you record revenue based on the services provided…" is an independent clause which represents a recommendation for a revenue recognition alternative other than the CFO's revenue recognition preference.
>
> "… and recognize actual costs incurred to date" is an independent clause which also represents a recommendation for a revenue recognition

alternative other than the CFO's revenue recognition preference. This idea unit is joined to the first idea unit by a coordinating conjunction (*and*).

All independent clauses that are joined by a coordinating conjunction (e.g. *for, and, nor, but, or, yet, so*) represent idea units.

POSITION STATEMENTS:

1 (a). Arguments against the CFO's revenue recognition preference.

Any statement that challenges the adoption of the straight-line method. These statements represent attempts to convince the CFO to modify his revenue recognition preference and include (1) arguments that reject the straight-line method (e.g. "The straight-line method is not appropriate…" or "We believe revenue recognized on a straight-line basis does not conform to GAAP…"); (2) concerns raised about the straight-line method (e.g. "We are concerned with recognizing revenue on a straight-line basis…" or "Our concern is that the straight-line method will overstate 2007 revenues and understate 2008 revenues…"); and (3) statements that question the appropriateness of the straight-line method (e.g. "We have noted that the straight-line method may not be the most appropriate…" or "Our analysis suggests that the services may not necessarily be provided continuously over time, as required for the straight-line method…" or "The straight-line method does not meet the EIC-141 performance objective…").

1 (b). Arguments for the CFO's revenue recognition preference.

Any statement that promotes the CFO's preference for the straight-line method. These statements can be identified in a similar manner as 1 (d).

Example: "I support your assumption of the straight-line basis for this year's results."

1 (c). Arguments against any revenue recognition alternative other than the CFO's revenue recognition preference.

Any statement that rules out the adoption of one or more revenue recognition alternatives other than the straight-line method. These statements can be identified in a similar manner as 1 (a).

Example: "I feel that the average rate method is not acceptable…"

1 (d). Arguments for any revenue recognition alternative other than the CFO's revenue recognition preference.

Any statement that promotes a revenue recognition alternative other than the straight-line method. These statements represent attempts to convince the CFO to consider or adopt other revenue recognition alternatives and include (1) arguments that directly promote another position (e.g. "The average rate method would be appropriate…"); (2) arguments that indirectly promote another position (e.g. "Revenue recognition should be based on actual hours used…"); or (3) any other arguments that promote a revenue recognition alternative other than the straight-line method.

POSITION-SUPPORTING STATEMENTS:

1 (e). Statements supporting any arguments against the CFO's revenue recognition preference.

Any statement that is used to develop, explain or support an argument against the straight-line method. These statements often either precede or proceed an argument against the straight-line method and include (1) references to accounting guidance (e.g. "EIC 141 reiterates the fact that performance should be completed before revenue is recognized…"); (2) conclusions based on the case facts (e.g. "Our underlying rationale is that if the seller is not able to satisfy the buyer's request for services, the buyer is not obligated to pay the consideration…")[26]; and any other statements that support arguments against the straight-line method.

1 (f). Statements supporting any arguments for the CFO's revenue recognition preference.

Any statement that is used to develop, explain or support an argument for the straight-line method. These statements can be identified in a similar manner as 1 (h).

Example: "… as you note, EIC 141 does permit the straight-line method unless evidence suggests revenue is earned in a different pattern."

1 (g). Statements supporting any arguments against revenue recognition alternatives other than the CFO's revenue recognition preference.

Any statement that is used to develop, explain or support an argument against one or more revenue recognition alternatives other than the straight-line method. These statements can be identified in a similar manner as 1 (e).

[26] Note: this example actually contains two idea units: (1) "…the seller is not able to satisfy the buyer's request for the services; and (2) "… the buyer is not obligated to pay the consideration…"

Example: "… The fixed/variable cost method would not be appropriate as we are relying on the fact that there was an even distribution of sales throughout the year…"[27]

1 (h). Statements supporting any arguments for revenue recognition alternatives other than the CFO's revenue recognition preference.

Any statement that is used to develop, explain or support an argument for any revenue recognition alternative other than the straight-line method. These statements often either precede or proceed an argument for any revenue recognition alternative other than the straight-line method and include (1) references to accounting guidance (e.g. "EIC 141 reiterates the fact that performance should be completed before revenue is recognized…"); (2) conclusions based on the case facts (e.g. "… we have noted that flying hours are the primary driver of your costs…"); and any other arguments that support any revenue recognition alternative other than the straight-line method.

RECOMMENDATION & SUGGESTION STATEMENTS:

1 (i). Requests for additional information from the CFO to support or justify the CFO's revenue recognition preference.

Any statement that requests additional information to support or justify adopting the straight-line method. These statements can include (1) questions ("Have you considered EIC 142 in your recommendation?" or "Would the contract be void if MES did not provide the full hours specified?"); (2) requests ("Additional analysis is required for a proper assessment of the appropriateness of the straight-line method…" or "We suggest that you provide documentation regarding ASO's intention for the use of the remaining flight hours…" or "I suggest that you take your position paper to your board for discussion. If they confirm your choice of policy we can then discuss your choice…")[28]; or any other statement that challenges the CFO to obtain addition support or justification for the straight-line method.

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[27] This example actually contains two idea units: (1) "… The fixed/variable cost method would not be appropriate…" which is an argument against the fixed/variable cost method; and (2) "… we are relying on the fact that there was an even distribution of sales throughout the year…" which is a statement that supports the argument against the fixed/variable cost method.

[28] The second example actually contains two idea units: (1) "I suggest that you take your position paper to your board for discussion…" which is a request for the CFO to justify the straight-line method to the Board; and (2) "If they confirm your choice of policy we can then discuss your choice…" which is a statement that challenges the CFO to obtain support for the straight-line method.

1 (j). Suggestions generated for the CFO to consider without supporting or recommending any specific revenue recognition alternative.

Any statement that provides suggestions for the CFO to consider without supporting or recommending any specific revenue recognition alternative. These statements can include questions or information to consider but differ from 1 (i) in that these suggestions do not require an action by the CFO.

Example: "You might want to consider the guidance in CICA 3400.08 which deal with long-term contracts…"

1 (k). Statements that explicitly recommend a particular course of action to resolve the revenue recognition issue.

Any statement that recommends a course of action to resolve the revenue recognition issue. These statements are usually conclusions that recommend a revenue recognition alternative based on the arguments generated but can also include recommendations to not adopt the straight-line method or any other recommendations that contributes to resolving the revenue recognition issue.

Example: "We recommend that the usage rate method would be more appropriate as opposed to your proposed straight-line treatment."

NEUTRAL STATEMENTS:

1 (l). Statements that refer to accounting standards without supporting or recommending any specific revenue recognition alternative.

Any statement that mentions or describes an accounting standard without supporting or recommending any specific revenue recognition alternative. These statements include references to accounting guidance similar to the example in 1 (e) but these statements are not used to develop, support or explain a specific revenue recognition alternative.

1 (m). Requests to meet again to discuss the revenue recognition issue.

Any statement that specifically requests the CFO to meet again to discuss the revenue recognition issue.

Example: (1) "I would like to sit down with you to review the alternatives…"

1 (n). Comments that summarize the case facts.

Any statement that reiterates or summarizes information available in the case facts.

Examples: “As you note, EIC 141 does permit the straight-line method unless evidence suggests revenue is earned in a different pattern…”; (2) “To summarize, you have decided to record revenue on the government contract on a straight-line basis.”

1 (o). Assumptions the participant generates about the case facts.

Any statement that makes an assumption about information contained in the case facts.

Examples: (1) “The contract with ASO is likely to be considered a long-term contract…”; (2) “If we assume that you are not limited by EIC 142…”

1 (p). Comments that describe the procedures that the participant followed in preparing a response to the CFO’s revenue recognition preference.

Any statement that details the activities, work or procedures that the participant followed in preparing a response to the CFO’s preference for the straight-line method.

Examples: (1) “Based upon my initial reading of the materials that you presented to me…”; (2) “In our review of the contract…”; (3) “In reviewing other possible methods of allocating this revenue…”; (4) “We have reviewed the specifics of the ASO contract…”

1 (q). Opening and closing statements.

Any statements that are used specifically to open/introduce or close/conclude the participant’s response to the CFO’s revenue recognition preference.

Examples: (1) “Thank you for the information and analysis provided regarding the revenue recognition for your new contract with ASO…”; (2) “We look forward to discussing this interesting accounting issue with you further…”; (3) “We would be pleased to discuss these issues with you at your earliest convenience…”; (4) “Thanks for the great work so far…”

Note that some of the above examples appear similar to 1 (m) but the above examples are not direct *requests* to meet.

1 (r). Statements that are directed to or intended for the researcher.

Any statements that are generated for the researcher to consider.

Examples: (1) “I would like to take an opportunity to comment on the survey…”; (2) “I do not work with public companies…”

1 (s). Other comments or statements generated by the participant.

Any statement that does not fit into any of the above categories.

2. The number of revenue recognition alternatives discussed, other than the CFO's revenue recognition preference.

The total number of revenue recognition alternatives (other than the straight-line method) that the participant discusses, refers to or otherwise mentions in their response to the CFO. The context of the statement is not important when determining the number of revenue recognition alternatives mentioned. The maximum number of revenue recognition alternatives discussed should be four (usage rate; average rate; gross margin/time elapsed; and fixed/variable cost), but participants may attempt to propose new alternatives that were not mentioned in the case facts.

3. Summarize any other comments or statements generated for the CFO.

Summarize any other comments or statements generated for the CFO that were included in category 1 (s).

4. Summarize any recommendations generated for the CFO to resolve the revenue recognition issue.

Summarize any recommendations generated by the participant that (if followed by the CFO) would resolve the revenue recognition issue. These recommendations can include (1) a clear rejection of the straight-line method (e.g. "The straight-line method is not appropriate…"); (2) direct recommendations for a particular revenue recognition alternative (e.g. "I recommend that the usage rate method be adopted for this transaction…"); (3) suggestions to adopt a specific revenue recognition alternative (e.g. "I would suggest the to recognition revenue according to the average rate method…"); (4) statements that indicate a clear preference for a particular revenue recognition alternative (e.g. "The usage rate method is preferable as the revenue is based on actual hours for usage for the two types of services…"); (5) identifying a set of appropriate revenue recognition alternatives (e.g. "The average rate or usage rate methods would be appropriate…").

Note: This variable should be considered separate from 1 (k). The definition of a *recommendation* for this variable is broader in comparison to 1 (k).

5. An overall evaluation of the effectiveness of the participant's response to the CFO's revenue recognition preference.

In your opinion, was the participant effective in persuading the CFO to carefully consider the participant's response before making a final decision related to the revenue recognition issue? Rate your response on an 11-point scale from 0 (not effective at all) to 10 (very effective).

SUMMARY OF THE CODING PROCEDURE

Along with this codebook, you will be provided the following documents:

1. A copy of the research materials.
2. A copy of the participant response data.
3. A coding sheet containing a column for each variable to be coded and a row for each participant.

After reading the research materials, conduct a preliminary review of all the participant responses before coding the data. After completing your preliminary review, consider each participant response in sequence and classify the data according to the variable descriptions.

The challenging aspect of this coding process is to appropriately allocate each idea unit to its related category. When completing this process, please remember the following:

1. Begin the coding for each participant by identifying the total number of idea units. After identifying the total number of idea units, allocate each idea unit to its relevant category.
2. The total number of idea units for each participant must equal the sum of all the idea units you allocated to categories 1 (a) to 1 (s). The coding sheet will include a column where you can sum the number of idea units that were categorized. Compare this categorized total to your total idea unit count from variable 1.
3. If you decide to change an entry on your coding sheet, clearly indicate that you made a change by placing an asterisk beside the changed cell.
4. Some idea unit categories will not be used for every participant. For example, a particular participant may not request to meet the CFO again, which means that no idea units would be allocated to 1 (m).
5. As you read and code the participant response data, write down any thoughts, comments or difficulties you have about the participant's response on the document containing the participant's response.

DETAILED CODING EXAMPLE

To illustrate the coding procedure, this section provides a detailed example of coding a participant response for each variable. For this example, I will break down the response to clarify the rationale for coding each variable.

Example Response

"The method employed should match the costs associated with the revenue stream. In this case, the allocation of revenue evenly over the period is not feasible as the costs are not even and the costs can be matched to the usage of the helicopter. The argument that the straight line method is consistent with the MES fixed-fee contract is not a supportable argument as this contract has a variable component based on usage. Therefore, the revenue recognition should be based on usage of the helicopter and the average rate method or the usage method both satisfy the aforementioned matching concept. The usage rate method is preferable as the revenue is based on actual hours for usage for two different type of services. In this latter method, the information is readily available and the revenue can be easily calculated. In addition, this method would be more readily understood by users and analysts of the financial information."

1. Idea units generated in response to the CFO's revenue recognition preference.

(1) "The method employed should match the costs associated with the revenue stream."
Rationale: This statement supports an upcoming argument against the straight-line method. Allocate this statement to category 1 (e).

(2) "…the allocation of revenue evenly over the period is not feasible…"
Rationale: The participant is stating that the straight-line method is not appropriate, which is an argument against the straight-line method. Allocate this statement to category 1 (a).

(3) "…as the costs are not even…"
Rationale: The participant is providing a supporting argument for why the straight-line method is not appropriate. Allocate this statement to category 1 (e).

(4) "…the costs can be matched to the usage of the helicopter."
Rationale: The participant is providing a supporting argument for why the straight-line method is not appropriate. Allocate this statement to category 1 (e).

(5) "The argument that the straight line method is consistent with the MES fixed-fee contract is not a supportable argument…"

Rationale: The participant is directly calling into question the straight-line method. Allocate this statement to category 1 (a).

(6) "…this contract has a variable component based on usage."
Rationale: The participant is providing a supporting argument against the straight-line method. Allocate this statement to category 1 (e).

(7) "…the revenue recognition should be based on usage of the helicopter…"
Rationale: The participant is making a supporting argument for another revenue recognition alternative. Allocate this statement to category 1 (h).

(8) "…the average rate method…"
Rationale: This is an argument for the average rate method. Allocate this statement to category 1 (d).

(9) "…the usage method both satisfy the aforementioned matching concept."
Rationale: The participant is identifying and recommending two specific revenue recognition methods (the usage rate method and the average rate method described in idea unit 8) that are alternatives to the straight-line method. Allocate this statement to category 1 (d).

(10) "The usage rate method is preferable…"
Rationale: The participant is stating a preferred revenue recognition alternative that is not the straight-line method. Allocate this statement to category 1 (d).

(11) "…as the revenue is based on actual hours for usage for two different type of services."
Rationale: The participant is supporting why the usage rate method is preferable. Allocate this statement to category 1 (h).

(12) "…the information is readily available…"
Rationale: The participant is generating arguments to support the usage rate method. Allocate this statement to category 1 (h).

(13) "…and the revenue can be easily calculated."
Rationale: The participant is providing another argument to support the usage rate method. Allocate this statement to category 1 (h).

(14) "…this method would be more readily understood by users…"
Rationale: The participant is providing yet another argument to support the usage rate method. Allocate this statement to category 1 (h).

(15) "…and analysts of the financial information."

Rationale: The participant is providing a final argument to support the usage rate method. Allocate this statement to category 1 (h).

This participant generated a total of 15 idea units, all of which have been allocated to specific idea unit categories.

2. The number of revenue recognition alternatives discussed, other than the CFO's revenue recognition preference.

The participant mentioned a total of two revenue recognition alternatives other than the straight-line method, the average rate method and the usage rate method.

3. Summarize any other comments or statements generated for the CFO.

None.

4. Summarize any recommendations generated for the CFO to resolve the revenue recognition issue.

The participant recommended that revenue should be recognized based on usage of the helicopter and followed up by identifying specific revenue recognition alternatives. The participant recommended either the average rate or the usage-rate method but stated that the usage rate method is preferred.

5. An overall evaluation of the effectiveness of the participant's response to the CFO's revenue recognition preference.

No example evaluation is provided as this variable is based on your opinion.

Appendix G: Coding Procedure used to Categorize Arguments

Arguments against the CFO's revenue recognition preference.

Any statement that challenges the adoption of the straight-line method. These statements represent attempts to convince the CFO to modify his revenue recognition preference and include (1) arguments that reject the straight-line method (e.g. "The straight-line method is not appropriate…" or "We believe revenue recognized on a straight-line basis does not conform to GAAP…"); (2) concerns raised about the straight-line method (e.g. "We are concerned with recognizing revenue on a straight-line basis…" or "Our concern is that the straight-line method will overstate 2007 revenues and understate 2008 revenues…"); and (3) statements that question the appropriateness of the straight-line method (e.g. "We have noted that the straight-line method may not be the most appropriate…" or "Our analysis suggests that the services may not necessarily be provided continuously over time, as required for the straight-line method…" or "The straight-line method does not meet the EIC-141 performance objective…").

Arguments for the CFO's revenue recognition preference.

Any statement that promotes the CFO's preference for the straight-line method. These statements can be identified in a similar manner as arguments for any revenue recognition alternative other than the CFO's revenue recognition preference.

Example: "I support your assumption of the straight-line basis for this year's results."

Arguments against any revenue recognition alternative other than the CFO's revenue recognition preference.

Any statement that rules out the adoption of one or more revenue recognition alternatives other than the straight-line method. These statements can be identified in a similar manner as arguments against the CFO's revenue recognition preference.

Example: "I feel that the average rate method is not acceptable…"

Arguments for any revenue recognition alternative other than the CFO's revenue recognition preference.

Any statement that promotes a revenue recognition alternative other than the straight-line method. These statements represent attempts to convince the CFO to consider or adopt other revenue recognition alternatives and include (1) arguments that directly promote another position (e.g. "The average rate method would be appropriate…"); (2) arguments that indirectly promote another position (e.g. "Revenue recognition should be based on actual hours used…"); or (3) any other arguments that promote a revenue recognition alternative other than the straight-line method.

Requests for additional information from the CFO to support or justify the CFO's revenue recognition preference.

Any statement that requests additional information to support or justify adopting the straight-line method. These statements can include (1) questions ("Have you considered EIC 142 in your recommendation?" or "Would the contract be void if MES did not provide the full hours specified?"); (2) requests ("Additional analysis is required for a proper assessment of the appropriateness of the straight-line method…" or "We suggest that you provide documentation regarding ASO's intention for the use of the remaining flight hours…" or "I suggest that you take your position paper to your board for discussion. If they confirm your choice of policy we can then discuss your choice…")[29]; or any other statement that challenges the CFO to obtain addition support or justification for the straight-line method.

Statements that explicitly recommend a particular course of action to resolve the revenue recognition issue.

Any statement that recommends a course of action to resolve the revenue recognition issue. These statements are usually conclusions that recommend a revenue recognition alternative based on the arguments generated but can also include recommendations to not adopt the straight-line method or any other recommendations that contributes to resolving the revenue recognition issue.

Example: "We recommend that the usage rate method would be more appropriate as opposed to your proposed straight-line treatment."

[29] The second example actually contains two idea units: (1) "I suggest that you take your position paper to your board for discussion…" which is a request for the CFO to justify the straight-line method to the Board; and (2) "If they confirm your choice of policy we can then discuss your choice…" which is a statement that challenges the CFO to obtain support for the straight-line method.