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THE IMPORTANCE OF FAIRNESS PERCEPTIONS: THE EFFECT OF ICFR AUDIT REPORTING OPTIONS AND FOCUS OF AUDITOR BEHAVIOR ON MANAGEMENT DEFENSIVENESS

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THE IMPORTANCE OF FAIRNESS PERCEPTIONS: THE EFFECT OF ICFR AUDIT REPORTING OPTIONS AND FOCUS OF AUDITOR BEHAVIOR ON MANAGEMENT DEFENSIVENESS

A Dissertation Presented

by

AUBREY R. WHITFIELD

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DEDICATION

To my wife, Meredith, whose strength and
encouragement made this possible.

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ABSTRACT

THE IMPORTANCE OF FAIRNESS PERCEPTIONS: THE EFFECT OF ICFR AUDIT REPORTING OPTIONS AND FOCUS OF AUDITOR BEHAVIOR ON MANAGEMENT DEFENSIVENESS

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Unlike financial statement audits, auditor reporting requirements for audits of internal control over financial reporting (ICFR) prohibit auditors from issuing a qualified opinion (i.e., only unqualified or adverse opinions are permitted). Using an experiment with experienced financial reporting managers, this study explores how managers' perceptions of the unfairness of the ICFR reporting requirements influence their judgments when audit issues arise. Based on fairness heuristic theory, I predict that managers are more defensive when the auditor is not permitted to issue a qualified opinion on the audit of ICFR (compared to the auditor being able to issue a qualified opinion) due to perceptions of unfairness, and managers' defensiveness will result in less willingness to agree to a material weakness and more aggressive positions on subsequent financial reporting issues. Results suggest managers do not find the option for the auditor to issue a qualified opinion on ICFR to be fairer than current regulations that exclude that option, and their judgments on audit issues are not affected. I also explore whether a client-focused (compared to audit team-focused) auditor can reduce managers' defensiveness on material weakness assessments and subsequent financial reporting issues. Results show that when managers believe the audit partner acts more on their behalf, they are more likely to agree to a material weakness assessment. Additional analyses also show managers' defensive behavior is related to perceptions of fairness.

Keywords: audit opinion; auditor-client interactions; fairness; internal controls

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CHAPTER 1

INTRODUCTION

Recent research has renewed the debate about whether audits of internal controls over financial reporting (ICFR) meet the intended effects of providing more informative internal control disclosures to investors (Aobdia et al. 2020) and improving overall financial reporting quality (e.g., Bhaskar et al. 2019; Gunn et al. 2021; Lennox and Wu 2022). Aobdia et al. (2020) show auditors fail to both detect and appropriately assess the severity of internal control deficiencies (ICDs), resulting in less informative internal control-related disclosures. Research also provides evidence that integrated audits (audits of both the financial statements and ICFR) are associated with lower financial reporting quality compared to financial statement-only (FS-only) audits for both US companies (Bhaskar et al. 2019) and Chinese companies (Lennox and Wu 2022). The purpose of this study is to explore whether the auditor reporting requirements governing audits of ICFR contribute to managers' defensiveness, resulting in the less informative ICFR disclosures and reduced financial reporting quality observed in prior studies. I also explore a potential mechanism for auditors to use to mitigate these effects.

Current auditing standards in the US permit an auditor to issue an unqualified or adverse opinion on audits of ICFR and exclude the option of issuing a qualified opinion. Prior to the implementation of this reporting requirement, management (e.g., Dominion Energy, Northrop Grumman, Chase) voiced opposition to the exclusion of the qualified opinion in comment letters, asserting the rule was unfair. Fairness heuristic theory (FHT) states that a person's perception of fairness influences their behavior, such as their willingness to cooperate (Lind and MacCoun 1992), and feelings of unfairness result in people taking defensive positions that can persist to other settings (Lind 2001). I expect that when managers are in a situation in which a control deficiency is identified as a potential material weakness and there is no option for the auditor to issue a qualified opinion, they will view the prospect of an adverse opinion on ICFR as unfair and exhibit defensive behaviors toward the auditor. However, if the option to issue a qualified opinion is present, I expect managers to view the audit of ICFR as relatively fairer, resulting in more cooperative behavior. In this study, I test whether providing the auditor with the option to issue a qualified opinion on ICFR, compared to current regulations under which there is no option to issue a qualified opinion, will be viewed as relatively fairer by managers. Theory suggests managers' perceptions of fairness will then affect their likelihood of disclosing internal control deficiencies and their position on a subsequent financial reporting issue related to a plant, property, and equipment (PPE) impairment.

While the effects of auditor reporting requirements on managers' decision-making are important, auditors are required to follow current regulations. Thus, it would be helpful to identify a behavior auditors can implement to mitigate managers' defensiveness. Returning to FHT, overall fairness judgments are commonly considered across three separate dimensions or "types" of fairness: (a) the fairness of actual outcomes or "distributive justice" (Adams 1965); (b) the fairness of the procedures used to determine outcomes or "procedural justice" (Leventhal 1980); and (c) the fairness of personal exchanges or "interactional justice" (Bies and Moag 1986; Bies 1987). There is a potential for auditors to improve management's perception of interactional justice, and thus overall fairness, by implementing behaviors focused on benefiting the client. In the

ICFR setting, auditors can demonstrate a focus on the client by testing controls earlier in the audit cycle to allow management time to remediate issues identified prior to year-end. While performing audit work prior to year-end (commonly referred to as interim testing) is common, the auditor's focus is generally on relieving time pressures on the audit team during year-end testing (KPMG 2015; PwC 2016; EY 2017; Deloitte 2018) and, typically, interim testing of ICFR is not performed early enough for management to remediate deficiencies (Christensen et al. 2021).

However, the effect of the auditor's client-focused behavior on management's perceptions of fairness and defensiveness may be influenced by other factors. Research indicates the relative importance of each of the three types of fairness (distributive, procedural, and interactional) in forming overall fairness perceptions is based on the salience of each type, which is dependent on the contexts of the setting (Lind 2001). The contexts I consider in this study are whether the option for the auditor to issue a qualified opinion is present or absent, and whether management is making an ICD decision consequential to the ICFR opinion or an unrelated financial reporting decision regarding PPE.

First, consider the current regulatory environment in which the auditor does not have the option to issue a qualified opinion. I expect management will likely focus on the unfairness of the audit of ICFR reporting requirements and exhibit defensive behavior in internal control-related situations. Additionally, I do not expect the auditor's client-focused behavior to influence management's willingness to agree to a material weakness because the implications of the ICFR reporting decision is most salient. ICFR auditor reporting requirements are less consequential for financial reporting decisions. As a result, management should use their perceptions of interactional justice as a predictor of auditor behavior in subsequent interactions. I predict management will be less defensive and propose higher audit adjustments for financial statement estimates when the auditor exhibits client-focused behavior compared to audit team-focused behavior. This suggests that client-focused interpersonal interactions may not improve the informational usefulness of ICFR reporting, but I expect it to result in higher quality financial reporting.

Next, consider the hypothetical environment where the auditor has the option to issue a qualified opinion on ICFR. I expect management will perceive the option to issue a qualified opinion as fairer compared to when there is no option, resulting in less defensive behavior. I also expect this increased perception of fairness of the auditing standard will allow for more of an effect of auditor behavior on management's decisions. Thus, a more client-focused auditor will cause management to be less defensive on both ICFR and financial reporting related issues compared to when the auditor is more audit-focused.

To explore my research question, I conduct a two-stage, 2 × 2 between-participants experiment using professionals with financial reporting and internal controls experience. Participants are asked to take on the role of a hypothetical public company controller. In Stage 1, participants indicate their willingness to agree to an internal control deficiency being classified as a material weakness. In the second stage, participants provide their initial proposed, preferred, and maximum acceptable write-downs for a PPE impairment. More willingness to agree to a material weakness and larger write-down amounts are indicative of less defensiveness.

I manipulate the auditor's ICFR reporting options dictated by auditing standards in which the option for the auditor to issue a qualified opinion is either present or absent. I also manipulate the focus of the auditor's behavior as client-focused or audit team-focused by altering the stated purpose of a change in the timing of interim tests of internal controls. In the client-focused condition, participants are informed the auditor will test more controls at an interim date that enables management time to fix ICDs identified during interim testing. In the audit team-focused condition, participants are informed the auditor will test more controls at an interim date to reduce audit team effort after year-end. By using an experiment, I manipulate the auditor's focus in planning interim control testing while holding the actual timing and results of testing constant.

Results do not support my hypotheses that the option for the auditor to issue a qualified opinion or auditor focus influences management's defensive behavior. Contrary to expectations, participants generally view auditing standards as fair, which may limit the potential effect the introduction of a qualified opinion option for the audit of ICFR has on management's defensiveness. Participants also did not perceive the manipulation of auditor focus as more or less helpful to them, although they did perceive the partner as acting more on their behalf in the client-focus condition (compared to the audit team-focus condition). When comparing participants who view the partner as acting more on their behalf to those who view the partner as acting less on their behalf, I find participants are less defensive and are more willing to agree to a material weakness conclusion. Additional analyses also support the underlying theory that overall perceptions of fairness are associated with defensive behavior. Path analyses show participants are willing to accept greater PPE write-offs when they view the audit as fairer compared to when the audit is viewed as less fair. Path analyses also demonstrate perceptions of overall fairness are significantly correlated with perceptions of procedural fairness and interactional fairness which is consistent with FHT.

My study contributes to research on manager defensive behavior, specifically related to ICD assessments and financial reporting aggressiveness. Results support the theory that financial reporting managers are less defensive and more cooperative when they feel the audit is fair. These findings provide a basis for future research to identify mechanisms auditors or regulators can implement to improve management's perceptions of fairness. My study also informs regulators as it provides evidence that regulations that are initially opposed can ultimately be viewed as fair over time.

The remainder of this paper is organized as follows. Chapter two provides background as well as the theoretical framework behind my hypotheses. Chapter three describes the research design. Chapter four discusses statistical analyses, and Chapter five concludes.

CHAPTER 2

BACKGROUND AND HYPOTHESIS DEVELOPMENT

2.1 Requirement for Audits of Internal Controls Over Financial Reporting

In response to the corporate failures of Enron, WorldCom, and others, the United States Congress passed the Sarbanes-Oxley Act, including Sections 302 and 404, which requires management to maintain and report on the effectiveness of the company's ICFR and to obtain assurance from an independent auditor (U.S. Congress 2002). Soon after, the PCAOB issued Auditing Standards No. 2 (AS2) establishing the requirement that the financial statement auditor for public companies also performs an audit of ICFR. AS2 stipulates that the identification of a material weakness dictates the form of the auditor's opinion of ICFR (PCAOB 2004).[1] A material weakness is defined as a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis (PCAOB 2007, AS 5 Appendix A.7). The identification of a material weakness requires that the auditor report an adverse opinion on management's ICFR. The absence of a material weakness results in an unqualified audit opinion, even when a significant deficiency (an ICD or combination of ICDs "less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of the company's financial reporting") is identified.

Since implementation of AS2, many studies have shown benefits from the audit of ICFR (compared to pre-SOX) as it has resulted in improved financial reporting quality (Iliev 2010) including fewer restatements (Nagy 2010), improved operational outcomes through more

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[1] AS2 was superseded by PCAOB Auditing Standard 5 (AS5) and is currently reorganized under PCAOB Auditing Standard 2201. AS2 established the integrated audit requirement and related auditor reporting options for the audit of ICFR. These requirements remain in effect and are applicable to all large accelerated filers as defined by the SEC. References to AS2 throughout the remainder of this study refer to these requirements.

accurate forecasts (Feng, Li, and McVay 2009), and reduced cost of capital through lower bank rates (Kim, Song, and Zhang 2011). Investors find disclosures of internal control issues important as the market reacts to adverse audit opinions (Schneider et al. 2009). Finally, the involvement of the external auditor is particularly important as research by Bedard and Graham (2011) shows auditors identify as much as 84 percent of material weaknesses and 72 percent of total ICDs during audit fieldwork.

2.2 Challenges of Audits of Internal Control Over Financial Reporting

The audit of ICFR, however, is not without its criticisms. Recent research by Bhaskar et al. (2019) compares small accelerated filers receiving integrated audits to non-accelerated filers receiving FS-only audits and finds integrated audits are associated with lower financial reporting quality as they are more likely to contain material misstatements and larger discretionary accruals. Bhaskar et al. (2019) rely on behavioral research that shows auditors fail to incorporate increased control risk into their audit plans (Hammersley et al. 2011; Asare et al. 2017) to explain the association between integrated audits and financial reporting quality. Another study by Bauer et al. (2020) explores the downstream effects of material weakness conclusions on auditor judgments, finding that auditors are more lenient on subsequent financial reporting positions after concluding there is a material weakness, ultimately resulting in lower financial reporting quality than when they conclude there is not a material weakness.

Lennox and Wu (2022) extend the above research by providing evidence that the diminished financial reporting quality associated with audits of ICFR is a result of increased auditor-client conflicts. They utilize a sample of Chinese companies in which audits of internal controls were introduced on a staggered basis over time and find that mandatory audits of internal controls are associated with a reduction in audit adjustments and an increase in material misstatements. They attribute these findings to increased auditor-client conflict in which management becomes less forthcoming with the auditor (Lennox and Wu 2022). This research highlights the importance of understanding how audits of ICFR impact *management's* behavior and not just the behavior of the auditor.

Research on auditor-client negotiations shows financial reporting conclusions are a combined or negotiated outcome between management and the auditor (Antle and Nalebuff 1991; Sanchez et al. 2007; Earley et al. 2008; Hatfield et al. 2008). Anecdotal evidence also suggests management's judgments may have an impact on outcomes of audits of ICFR. Then PCAOB Board Member Jeanette Franzel provided insight into the challenges auditors face in a speech in 2015 in which she noted, "I've heard anecdotally that it is difficult for auditors to convince an audit client that a material weakness exists in the absence of a material misstatement." This quote is supported by Bedard and Graham (2011) who find that management consistently assesses ICDs as less severe than their auditors. Thus, a potential challenge for auditors is convincing management to agree to a material weakness. The above quote and related research suggest a material weakness conclusion may not be perceived by management as a fair result, especially in the absence of a material misstatement.

Prior to AS2, the relevant auditing standard for audits of ICFR was PCAOB Attestation Standard Section 501 (AT 501). Like AS2, AT 501 required auditors to issue an unqualified opinion in the absence of a material weakness. However, if a material weakness was identified, AT 501 permitted the auditor to issue either a qualified opinion or adverse opinion, depending on the significance and pervasiveness of the material weakness to the financial statements. AS2 effectively removed the option for the auditor to issue a qualified opinion, leaving only the options to issue an adverse opinion in the presence of a material weakness (even if it is not pervasive) or an unqualified opinion when there is no material weakness.

Prior to the issuance of AS2, companies and accounting firms expressed concern that the pass/fail nature of the proposed standard was unfair. For example, a comment letter from Dominion Energy states, “A qualified ‘except for’ conclusion would seem more appropriate in situations where a material weakness has an isolated impact on the overall effectiveness of [ICFR]. If available, a qualified opinion in this example would provide more meaningful information” (2004). JPMorgan Chase noted “the external auditor should have the latitude” to issue a qualified opinion (2004). Northrop Grumman Corporation voiced the opinion that “the fact that a material weakness exists is insufficient by itself to create…an adverse opinion” (2004). The accounting firm, Crowe Chizek and Company LLC similarly noted, “the proposed report on [ICFR] is an ‘on-off’ switch. If there is one material weakness, the internal control system IN TOTAL is described as not providing ‘effective internal control over financial reporting’” (2003). Deloitte describes a similar situation as “not appropriate” with BDO describing it as “unnecessarily harsh.” PwC called the decision to exclude the option of a qualified opinion “too restrictive.” Together, this anecdotal evidence suggests that management may perceive the auditor reporting requirements for audits of ICFR as unfair. The psychology and organizational sciences literatures consistently show individuals’ fairness perceptions affect their behavior in a multitude of ways. In the following section, I use fairness heuristic theory as a lens to explore how management’s perceptions of fairness with respect to ICFR audits impact their behavior.

2.3 Fairness Heuristic Theory

FHT has evolved since its first presentation, but there are two basic components posited by this theory that have remained constant: (1) fairness judgments serve as a proxy for interpersonal trust in guiding decisions about whether to behave cooperatively in social situations, and (2) people quickly form fairness judgments when faced with situations where the level of cooperative behavior exerted is relevant (Lind 2001). In short, people use perceptions of fairness to inform their behavior both in response to and in anticipation of social interactions (Shapiro and Kirkman 2001). Fairness judgments are commonly considered across three separate dimensions or "types" of fairness: (a) the fairness of actual outcomes or "distributive justice" (Adams 1965); (b) the fairness of the procedures used to determine outcomes or "procedural justice" (Leventhal 1980); and (c) the fairness of personal exchanges or "interactional justice" (Bies and Moag 1986; Bies 1987). Perceptions of fairness across each of the three dimensions are used to develop an overall perception of fairness that influences an individual's behavior in social situations. Figure 1 depicts the relationship of each dimension to overall fairness perceptions and behavior.

To apply these concepts to an auditor-client setting, there are various parties that are associated with the three components of overall fairness from management's point of view. Standard-setters and regulators determine the rules, such as AS2, that auditors and management are forced to operate within. These rules are part of the basis for procedural fairness perceptions. Throughout the duration of an audit, management must interact with the auditor. Those interactions form the basis of perceived interactional fairness. Finally, there are many outcomes that occur throughout an audit, including severity assessments of ICDs and negotiations of accounting issues such as impairment decisions, that form the basis for distributive fairness. During an active audit, actual outcomes that form the basis for distributive fairness, such as ICD severity assessments and audit adjustments oftentimes are not finalized until the end of the audit. As such, perceptions of fairness related to the underlying procedures and interpersonal interactions during the audit may have an effect on management behavior in arriving at those outcomes.

The effect of procedural fairness relative to interpersonal fairness is a key focus of this study. Prior research suggests the impact of each of the three components, and resulting behavior depends on the context of the situation and the related salience of each component (Lind 2001). For example, Masterson et al. (2000) show that employees can differentiate between the source of a perceived unfairness (as originating from the organization or supervisor) and that perceived unfairness accordingly predicts behavior directed toward the organization or supervisor. Further, research shows that the types of justice (i.e., procedural, interactional, and distributive) are more predictive of behavior depending on their salience (Jones and Martin 2009).

I explore how auditor reporting requirements and auditor behavior affect managers' judgments across two common audit issues, an ICD severity assessment and a PPE obsolescence adjustment. Because FHT predicts that the salience of different fairness perceptions is dependent on context, such as whether the decision is related to the source of unfairness, I develop my hypotheses for each audit issue separately.

2.3.1. Fairness and Internal Control Severity Assessments

Anecdotal evidence (Franzel 2015) and research (Bedard and Graham 2011) provide support for the idea that managers feel a material weakness ICD assessment under the pass/fail model required by AS2 is unfair, especially when an ICD is not pervasive. Adverse ICFR opinions have negative consequences to the company and management. For example, adverse ICFR opinions are negatively associated with the company's stock price (Hammersley, Myers, and Shakespeare 2008) and make it more costly to raise debt and capital (Ashbaugh-Skaife, Collins, Kinney, and LaFond 2009; Hammersley, Myers, and Zhou 2012). Research also shows adverse ICFR opinions are negatively associated with management's compensation (Hoitash, Hoitash, and Johnstone 2012) and future career prospects (Li, Sun, and Ettredge 2010). In response to adverse ICFR opinions, management is more likely to dismiss their auditor (Ettredge et al. 2011; Newton et al. 2016), while management actively avoids audit firms that issue more adverse ICFR opinions (Cowle and Rowe 2022). Consistent with the above research, I expect management to view the current auditing standard that excludes the possibility of issuing a qualified opinion as less fair, compared to if there were the option for the auditor to issue a qualified opinion. As such, I expect managers to be less likely to agree to a material weakness when the auditor does not have the option to issue a qualified opinion than when there is an option to issue a qualified opinion. Formally stated:

> **H1a:** Managers will be more likely to agree to a material weakness when the auditor has the option to issue a qualified ICFR opinion than when the auditor does not have the option to issue a qualified ICFR opinion.

There is a potential for the auditor to impact management's perception of overall fairness through interpersonal interactions during the audit, where client-focused behavior should increase perceptions of interactional fairness. FHT suggests the relative salience of each type of fairness (i.e., procedural, interactional, or distributive) determines which has more of an impact on individuals' overall fairness perceptions and behavior (Jones and Martens 2009). When the option for the auditor to issue a qualified opinion on the audit of ICFR is absent, the all-or-nothing nature of the potential outcomes will be very salient. Management will be averse to a material weakness assessment, making the perceived fairness of the underlying reporting requirements (i.e., procedural fairness) more predictive of management's level of cooperation on internal control-related matters. As a result, the focus of auditor behavior and resulting impact on interactional justice perceptions will not have an effect on management's ICD severity assessments.

When the option for the auditor to issue a qualified opinion is present, I expect management to view the auditor reporting requirements as relatively fairer than when the option for the auditor to issue a qualified opinion is absent. The presence of a qualified opinion option will reduce the likelihood of an adverse opinion and the related potential negative effects to the company. With the threat of an adverse opinion becoming less likely, the auditor's interpersonal behavior should also become a relatively more salient factor for management in informing their behavior toward future auditor-client interactions. As such, management will be less defensive when the auditor is client-focused (compared to audit team-focused), resulting in managers being more likely to agree to a material weakness severity assessment.

Taken together, I expect the effect of the auditor's focus on management's likelihood to agree to a material weakness will depend on whether the option for the auditor to issue a qualified opinion is absent or present. If the option for the auditor to issue a qualified opinion is *present*, management will be more likely to agree to a material weakness assessment when the auditor exhibits client-focused behavior compared to audit team-focused behavior. If the option for the auditor to issue a qualified opinion is *absent*, management will be less likely to agree to a material weakness irrespective of the auditor's focus. Formally stated:

H1b: Managers will be most likely to agree to a material weakness when the auditor has the option to issue a qualified opinion on ICFR and exhibits client-focused behavior (compared to audit-team focused behavior) and least likely to agree to a material weakness when the auditor does not have the option to issue a qualified opinion.

The above hypotheses predict a main effect of auditor reporting option (H1a) and an interaction in which the auditor's client-focused behavior is effective at reducing management's defensiveness on an ICD severity assessment when regulatory requirements allow the auditor to issue a qualified opinion on the audit of ICFR and not effective when the auditor is not allowed to issue a qualified opinion (H1b). Figure 2 depicts the predicted pattern of results. Figure 3 illustrates the perceptions of fairness that mediate the relationship between the auditor's reporting options and the focus of auditor behavior on management's likelihood to agree to a material weakness.

2.3.2 Fairness and Financial Reporting

According to FHT, perceptions of fairness can be "sticky" resulting in a spillover effect from one interaction to the next (Lind 2001). While the auditor reporting requirements of the audit of ICFR (i.e., the presence or absence of an option to issue a qualified opinion) are not directly relevant to the PPE obsolescence issue, FHT suggests perceptions of unfairness will have a carry-over effect to subsequent auditor-related judgments. Consistent with H1a, I expect management will continue to be relatively less defensive in their accounting position when the auditor has the option to issue a qualified ICFR opinion compared to when there is no option to issue a qualified opinion. Formally stated:

H2a: Managers will propose smaller audit adjustments in the absence of a qualified ICFR option than in the presence of a qualified ICFR opinion option.

As noted in H1b, I do not expect client-focused auditor behavior (compared to audit team-focused behavior) to significantly affect management's likelihood of agreeing to a material weakness in the absence of the option for the auditor to issue a qualified ICFR opinion. However, in the context of a PPE obsolescence decision, the rules governing the audit of ICFR do not have a direct impact on management's position. As such, management's perception of the interactional fairness of the auditor will be a more relevant indicator of future anticipated fairness (Shapiro and Kirkman 2001). The expectation of greater fairness would likely correspond to a less defensive accounting position in which managers propose larger adjustments on the PPE obsolescence decision. Formally stated:

> **H2b:** Managers will propose larger audit adjustments when the auditor behavior is client-focused versus audit team-focused.

H2a and H2b predict two main effects of auditor ICFR reporting option and auditor client-focused behavior on management's defensiveness on a PPE impairment adjustment. Figure 4 depicts the predicted effects. Figure 5 illustrates the perceptions of fairness that mediate the relationship between the auditor's reporting options and the focus of auditor behavior on management's proposed PPE write-down.

2.3.3. Fairness and Locus of Control

There is a potential that managers view the option of a qualified opinion as less advantageous. In the current regulatory environment, management may view the threshold of a control deficiency being classified as a material weakness as quite high and the introduction of a qualified opinion lowers that threshold. This might result in management feeling as though they are less likely to avoid a material weakness. If this were to occur, individuals who inherently feel as though they have more control over situations would be more likely to view the introduction of a qualified opinion as a disadvantage and not as fairer. Locus of control is a personality trait defined as “a generalized expectancy that rewards, reinforcements, or outcomes in life are controlled either by one’s own actions (internality) or by other forces (externality)” (Spector, 1988: p. 335). Individuals with an internal locus of control tend to be more successful in influencing their environment (Law 2009). To gain insight into this possibility, I pose the following research question:

> **RQ:** Does locus of control affect manager’s perceptions of the fairness of an option for the auditor to issue a qualified opinion on ICFR relative to the absence of a qualified opinion option.

CHAPTER 3

METHOD

3.1 Experimental Design and Participants

To test my predictions, I ran a two-stage, 2×2 between-participants experiment via Qualtrics with professionals having financial reporting and ICFR experience serving as participants. Sixty-two participants completed the instrument. To ensure participants have an appropriate knowledge of financial reporting, I utilized LinkedIn to recruit professionals who have, or have recently held, relevant positions (i.e., Financial Reporting Managers, VPs of Financial Reporting, Controllers, and CFOs). To ensure participants have knowledge of ICFR regulations, I recruited only those participants who have experience working for a public company in a financial reporting role or have prior experience working for a large public accounting firm (i.e., firms inspected annually by the PCAOB). Participants reported job titles ranging from Accountant to Chief Financial Officer (refer to Table 1 for reported job titles) with an average of 13.8 years of financial reporting experience. Seventy-six percent of participants (n=47) reported experience with a public company with 50 percent of participants (n=31) currently working for a public company. Eighty-two percent of participants (n=51) have prior audit experience, with 5.4 years of experience as an auditor. Seventy-one percent of participants reported having a CPA with an additional 5 percent holding other certifications. Participants rated their experience working with ICFR on an 11-point scale (0=No prior experience; 10=Dealt with this very often), with a mean of 7.5 and only 3 participants indicating no ICFR experience.

Participants were asked to assume the role of controller of a hypothetical public data analytics company, where they were asked to provid judgments on two separate audit issues, an ICD severity assessment in Stage 1 and a PPE impairment issue in Stage 2. ICD severity assessments are commonly performed at the conclusion of the audit as audit standards require that auditors assess ICDs individually and in aggregate with other ICDs. Therefore, it is likely that financial statement audit adjustments occur after ICDs are identified and before the related severity assessments are completed. I manipulated the auditor's reporting option of issuing a qualified opinion on ICFR as either present or absent. I also manipulated whether the rationale provided by the auditor for the change in the timing of internal control testing performed by the auditor is either client-focused or audit team-focused.

3.2 Experimental Procedures

Participants first provided consent to participate in the study.[2] Participants were then shown various facts about the audit setting. The information provided includes the requirement that auditors of public companies are required to perform both an audit of the financial statements and of ICFR, and auditors have three opinions available to issue when performing the audit of the financial statements (i.e., unqualified, qualified, and adverse). Participants were also reminded of the responsibilities of management related to ICFR, as well as the responsibilities of the auditor in performing the audit of ICFR. Finally, for the audit of ICFR, participants were reminded of the auditor's requirement to assess the severity of any control deficiencies identified, and were provided with the

[2] Institutional Review Board approval was obtained for human subject research.

definition of each severity category (i.e., control deficiency, significant deficiency, and material weakness) and whether each severity type requires disclosure in the annual statement and/or communication to the audit committee. To ensure participants processed the audit-related information, I asked participants to indicate what types of audits are performed for a public company and what deficiency classification must be disclosed in the annual statements.

Participants then viewed the case-related materials. At this point, participants viewed the manipulation of auditor ICFR reporting option in which they were given information detailing the rules stipulating the types of opinions the auditor can issue for the audit of ICFR, as well as examples of each opinion and definitions of internal control deficiencies that dictate those types of opinions. Participants were then provided background information about the company and the accounting firm performing the ICFR and financial statement audits. This was followed by the manipulation of the focus of auditor behavior through the stated purpose of a change in the timing of interim tests of controls. Participants were then informed that no issues were identified during interim testing. Participants were then told to assume it is now after year-end and additional controls were tested. During year-end testing, the auditor identified a control deficiency in management's review of revenue contracts, resulting from a change in management's processes. To prevent participants from attributing blame to the auditor for "missing" the deficiency during interim testing, it is noted that the deficiency resulted from a change in management's procedures late in the year. Next, participants were provided with details relevant to assessing the severity of the control deficiency, as well as the auditor's position that the control deficiency may rise to the level of a material weakness. I then collected participants' willingness to agree to a material weakness assessment, as well as their independent assessment of the deficiency.

Stage 2 of the case began by noting the auditor is continuing their work on the ICFR audit and financial statement audit. Participants were then informed of a potential accounting issue related to PPE. Participants were provided with information that the company's PPE was upgraded in the past year. As a result, PPE with a book value of $100.8 million is being phased out and a write-down is necessary. Participants were provided with the Acquisitions Manager's write-down estimate and rationale, followed by the auditor's estimate and rationale. Participants then provided their initial proposed write-down, preferred write-down, and maximum acceptable write-down amount. This is followed by measures of perceived overall fairness, perceived fairness of the ICFR requirements (procedural fairness), and perceived fairness of the interaction with auditors (interactional fairness), followed by other post-experimental questions (PEQs).

3.3 Independent Variables

I manipulated auditor ICFR reporting options across two levels by explaining the implications of a control deficiency and its impact on the auditor's ICFR opinion. In the qualified opinion *present* condition, participants were told to assume auditing standards are similar to the financial statement audit and permit the auditor to issue an unqualified, qualified, or adverse opinion for the audit of ICFR. In the qualified opinion *absent* condition, participants were told that, unlike the financial statement audit, auditing standards permit the auditor to issue either an unqualified opinion or adverse opinion. The wording of the opinion paragraph for each applicable auditor's report was also provided to participants. The opinion paragraphs for the unqualified and adverse opinions are modeled using PCAOB guidance (PCAOB AS 2201.88). The opinion paragraph for a qualified opinion incorporates the wording previously used in PCAOB guidance prior to the issuance of AS2 (PCAOB AT 501.55). Refer to Appendix A for wording included in the opinion paragraphs for ICFR audit reports. Participants were reminded of the auditor's reporting options after they reviewed the control deficiency details and before providing their severity assessments.

I also manipulated the focus of auditor behavior as *client-focused* or *audit team-focused*. The focus of auditor behavior was manipulated by altering the explicit rationale for why the auditor adjusted the timing of interim internal control testing. In the *client-focused* condition, the audit partner informs the participant that the team would like to perform interim internal control testing earlier in the year to allow management time to remediate identified control deficiencies. This change in timing will also shift work away from the typical auditor "busy season" felt after year-end. In the *audit team-focused* condition, the partner's stated purpose in performing interim control testing earlier in the year is to shift audit team work away from the time period after year-end. In all conditions, the participant was informed additional control testing is still required after year-end in accordance with auditing standards. Participants are then told to assume they agree to the change in the timing of testing and that they will notify their staff to the changes.

I chose to manipulate the focus of auditor behavior in the context of when interim internal control testing is performed for several reasons. First, AS 2201 requires that auditors assess management's ICFR as of year-end (i.e., December 31 for companies reporting on a calendar year basis) but allows auditors to test controls throughout the annual period as it is impractical to perform all control testing after year-end. Auditing standards also explicitly allow for management to remediate control deficiencies prior to year-end if the auditor has enough time to assess the design and operation of the new or revised control (PCAOB AS 2201.53). This allows the auditor to plan interim control testing with the explicit purpose of providing management enough time to remediate control deficiencies.[3] This approach allowed me to manipulate the stated purpose for the change in timing of procedures while holding the actual timing of those procedures constant across conditions. It also allowed for control deficiencies to be identified as part of year-end control testing where a severity assessment is still required and remediation is not possible. I also manipulated the stated purpose of change in interim control testing because I expect the potential to remediate deficiencies (if identified at interim) to be very important to financial reporting managers. Each of the Big Four audit firms have publicized their efforts to reduce auditor workload during busy season by performing more work during interim periods (KPMG 2015; PwC 2016; EY 2017; Deloitte 2018). However, only recently has research highlighted the benefit of allowing management to remediate control issues identified earlier in the audit (Christensen et al. 2021).

3.4 Dependent Variables and Other Measures

The main dependent variable for Stage 1 of this study is management's likelihood of agreeing to a material weakness control deficiency classification, indicated on an 11-point scale from 0 (Definitely would NOT agree to a material weakness) to 10 (Definitely would AGREE to a material weakness). Since auditing standards require a categorial

[3] When interim audit testing is performed, the auditor is also required to perform additional procedures for the period through year-end (PCAOB AS 2201.55).

conclusion on the deficiency, participants were asked to indicate whether they would classify the deficiency as a control deficiency, significant deficiency, or material weakness in the company's public report on the effectiveness of the system of internal controls. I also asked participants to indicate their assessment of the control deficiency severity on an 11-point scale with endpoints and midpoint labeled as "Control Deficiency" at 0, "Significant Deficiency" at 5, and "Material Weakness" at 10 as a measure of severity within each category of deficiency.

Stage 2 introduces the PPE obsolescence issue. Consistent with prior auditor-client negotiation literature, I solicited participant's initial proposed, preferred, and maximum write-down amounts (Bame-Aldred and Kida 2007; Hatfield et al. 2008). The total book value of the PPE under question is \$100.8 million. According to the case materials, the auditor has proposed a \$75.8 million write-down, while the PPE Manager believes a \$40.8 million write-down is appropriate. Participants were asked to indicate the initial write-down they would propose to the auditor, the write-down they would prefer to report in the financial statements, and the maximum write-down they are willing to accept. All write-down questions were solicited on a slider scale from \$0 (no adjustment) to \$75.8 million (full audit adjustment).

To explore the underlying mechanism and test the applicability of FHT, I asked participants various post experimental questions related to fairness, auditor trust, and satisfaction. An example of a question intended to measure overall fairness of the audit of ICFR is: "Overall, the audit of ICFR is fair" measured as participants' level of agreement on an 11-point scale (0=Strongly Disagree to 10=Strongly Agree). Additional questions were asked to gain measures of procedural fairness (agreement that auditing standards allow the auditor to arrive at a fair conclusion) and interactional fairness (agreement that the audit partner has acted on the participants' behalf). To explore my research question, I solicited responses to an internal locus of control scale adapted from Hock (1999). Two examples of these questions, in which participants indicate their level of agreement on 10-point scales from 0 (Strongly Disagree) to 10 (Strongly Agree), are "Becoming a success is a matter of hard work; luck has nothing to do with it" and "Many of the unhappy things in people's lives are partly due to bad luck." Finally, I asked questions intended to assess participant's expectations for what the auditor will conclude and if they expect outcomes to be fair. Refer to Appendix B for a list of post experimental questions asked to assess perceived fairness (overall, procedural, interactional, and distributive) and locus of control. The case concludes with manipulation checks and demographic questions.

CHAPTER 4

RESULTS

4.1 Manipulation Checks

To assess recall of the auditor's ICFR reporting options, I asked participants, "According to the options presented in this case, was there an option for the auditor to issue a Qualified Opinion on the Audit of Internal Controls over Financial Reporting?" in which participants responded with a "Yes" or "No". Forty out of 62 participants (65 percent) responded correctly, which is significantly better than chance (χ^2 = 5.2, p = 0.022).[4] Participants rate the focus of auditor behavior by indicating how much the change in timing of audit procedures was intended to help them on an 11-point scale from 0 ("Not at all") to 10 ("To a very large extent"). The difference between the audit team-focus condition (mean = 7.50) and the client-focus condition (mean = 7.03) is not significant (p = 0.571), suggesting an unsuccessful manipulation. As part of the post-experimental questionnaire, I asked participants their level of agreement, on an 11-point scale, that "the audit partner acted on their behalf." Participants in the client-focus condition agreed to a greater extent (mean = 6.00) than participants in the audit focus condition (mean = 4.67; p = 0.035, one-tailed). Together, these questions suggest participants understood the partner attempted to act on their behalf in the client-focus condition compared to the audit team-focus condition, however the actual change in timing is not viewed as any more helpful to the client in either condition.

[4] While 65 percent is significantly greater than chance, it is not strong evidence that my opinion manipulation was consistently attended to and internalized. As my predicted effects depend on participants attending to the manipulations, I perform all analysis with a full sample as well as with a restricted sample of only those responding to the opinion option manipulation check correctly. Inferences remain the same.

4.2 H1: Internal Control Deficiency Severity Assessments

H1a predicts a main effect of the auditor's ICFR reporting option, where management will be more likely to agree to a material weakness when there is an option to issue a qualified opinion than when there is no option. H1b predicts an interaction where client-focused behavior (compared to audit team-focused behavior) will result in managers being more likely to agree to a material weakness when there is an option to issue a qualified opinion; however, the auditor's focus will not have an effect when there is no option to issue a qualified opinion. I perform a two-way ANOVA to test H1a and do not find a significant main effect of ICFR reporting option ($p = 0.477$, one-tailed). For H1b, I predict a specific pattern of an interaction. In accordance with Guggenmos et al. (2018), I first perform a visual fit test and note the pattern of results is not consistent with the predicted interaction. Additionally, the two-way ANOVA interaction is not significant ($p = 0.855$). H1a and H1b are not supported. See Table 2, Panel A for descriptive statistics by condition and Panel B for results of the two-way ANOVA.

4.3 H2: PPE Obsolescence – Financial Reporting Quality

H2a and H2b predict main effects of the auditor ICFR reporting option and focus of auditor behavior, respectively, on manager's PPE obsolescence decision. I perform a two-way ANOVA with each manager's write-down decisions (initial proposed, preferred, and maximum allowed). Refer to Table 3 for descriptive statistics and p-values for each of the main and interactive effects.[5] I do not find a significant main effect of ICFR

[5] Based on prior studies that solicit initial proposed, preferred, and maximum acceptable write-down values from participants (Bame-Aldred and Kida 2007; Hatfield et al. 2008), I expected participants to provide ascending values for each of the write-down amounts, respectively. However, cell means for preferred are less than initial proposed. An examination of the histograms for each write-down amount, included in Appendix C, reveals that 5 participants chose a preferred write-down amount of $0. Removing these responses provide a pattern of means consistent with prior research (Bame-Aldred and Kida 2007; Hatfield

reporting option (all p-values ≥ 0.355, one-tailed), thus H2a is not supported. I do not find a significant main effect of auditor focus for either the initial proposed write-down amount ($p = 0.878$, one-tailed) or preferred write-down amount ($p = 0.719$, one-tailed). I do find a marginally significant main effect of auditor focus on management's maximum allowed write-down ($p = 0.077$, one-tailed). This provides weak support for H2b.

4.4 Effect of Locus of Control

My research question highlights the potential for participants high in locus of control to view the inclusion of an auditor's option to issue a qualified opinion on ICFR as a disadvantage in which it becomes more difficult to avoid a material weakness assessment. In this scenario, participants higher in locus of control would view the option for the auditor to issue a qualified ICFR opinion as less fair than when there is no option for the auditor to issue a qualified opinion. Participants lower in locus of control should view the option for the auditor to issue a qualified opinion as relatively fairer, as it provides more of an opportunity of avoiding an adverse opinion. These predictions suggest an interaction between the participants' locus of control and auditor reporting option on perceptions of procedural justice. A negative interaction term (β_3) on the below regression (1) would provide evidence consistent with this possibility.[6]

$$\text{Proc\_Justice} = \beta_0 + \beta_1\text{RepOption} + \beta_2\text{LoC} + \beta_3\text{RepOption*LoC} + \varepsilon \qquad (1)$$

To begin, I assess the validity of the locus of control construct by performing a principal component factor analysis in SPSS using a Direct Oblimin rotation, which

et al. 2008). Inferences for preferred write-down amounts remain unchanged when those participants are excluded.

[6] Proc_Justice is the sum of three questions measuring procedural justice as indicated in Appendix B. RepOption is a dichotomous variable equal to 0 when the auditor does not have the option to issue a qualified opinion on the audit of ICFR and 1 when there is an option for the auditor to issue a qualified opinion. LoC is captured by the locus of control questions as indicated in Appendix B.

recognizes items may not be orthogonal. The factor analysis includes the four questions indicated for "Locus of Control" in Appendix B. As expected, the four questions load on a single component with an Eigenvalue greater than 1 and a minimum loading of 0.552. Procedural Justice is a factor score produced from responses for the three questions indicated for "Procedural Justice" in Appendix B.[7] I use the ordinary least-squared regression in SPSS to examine the relationship between the auditor reporting option and locus of control on perceptions of procedural fairness. Untabulated results show a marginally significant effect of LoC on Proc_Justice ($\beta_2 = 0.573$, $p = 0.085$); however, there is a nonsignificant effect of RepOption ($\beta_1 = -0.337$, $p = 0.504$) and RepOption*LoC ($\beta_3 = -0.504$, $p = 0.331$) on Proc_Justice. The marginally significant positive coefficient for LoC is consistent with theory in which individuals higher in LoC feel they have more control over the outcome of things in their life and would thus generally find situations in which they have some control as more fair. A potential explanation for the nonsignificant coefficients for RepOption and RepOption*LoC is that participants do not perceive the auditor's option to issue a qualified opinion as any more or less fair compared to the absence of that option.

4.5 Supplemental Analyses – Fairness Heuristic Theory

Although there is a general lack of significant results related to my hypotheses, I do capture additional data regarding participants perceptions of the auditor that can be analyzed to gain insight into the applicability of FHT in the audit setting. As previously noted, I captured participants' level of agreement that the audit partner acted on their

[7] Proc_Justice is also validated using a principal component analysis. Details are explained in the Supplemental Analysis section.

behalf on an 11-point scale from 0 (Strongly Disagree) to 10 (Strongly Agree). The mean response across all conditions is 5.35 and the median is 5, with a range from 0 to 10. My underlying theory suggests that participants' perception of interactive fairness should affect their willingness to agree with management. As such, I perform a median split on *behalf* and analyze its effect on participants' likelihood to agree to a material weakness, as well as their subsequent write-off decision. I run a two-way ANOVA with *behalf* and *opinion option* as the factors, while dropping the *auditor focus* independent variable as the manipulation was not successful.

Consistent with FHT, there is a significant main effect of *behalf.* Participants who feel the partner acted more on their behalf are more likely to agree to a material weakness assessment than participants who feel the partner acted less on their behalf (Means = 5.58 and 3.81, $p = 0.021$, untabulated).[8] Interestingly, participants' rating of the severity of the control deficiency is not significantly different ($p = 0.253$) depending on whether the participant views the auditor as acting more or less on their behalf. I interpret this to provide evidence that participants' judgment regarding the severity of the control deficiency is not affected by the perception that the auditor acts on their behalf; however, they are more likely to agree to a more severe classification. I also performed a two-way ANOVA to analyze the effect of *behalf* and *opinion option* on management's subsequent PPE impairment decisions. Untabulated results indicate there are no significant main or interactive effects of *behalf* or *opinion option* on management's initial proposed, preferred, or maximum acceptable write-down amounts (all p-values ≥ 0.182).

[8] A response of 5 on the scale suggests participants neither agree nor disagree that the partner acted on their behalf. Inferences remain the same when restricting the analysis to compare only those participants who responded with a rating of less than 5 to those who responded with a rating of greater than 5.

To further assess the validity of FHT in my setting, I performed a path analysis based on the theoretical model depicted in Figure 1. First, I assessed the validity of my constructs by performing a principal component factor analysis in SPSS using a Direct Oblimin rotation, which recognizes constructs may not be orthogonal and is appropriate based on my underlying theory. The factor analysis includes the 10 questions indicated for overall, procedural, interactional, and distributive fairness as shown in Appendix B. Results indicate four components with an Eigenvalue greater than 1, with each item loading onto the construct as expected and depicted in Appendix B. All loadings are greater than 0.570, and all cross-loadings are less than 0.437.

I then utilize the Maximum Likelihood estimation procedure in IBM SPSS AMOS v.28 which maintains the assumption of multivariate normality to test my theoretical path model using management's maximum acceptable write-down as the dependent variable. Goodness of fit was evaluated using the ratio of chi-squared and degrees of freedom, comparative fit index (CFI), Tucker-Lewis index (TLI), Incremental Fit Index (IFI), and root mean square error of approximation (RMSEA). The measures of goodness of fit, along with cut-off criteria suggested by Schreiber et al. (2006), are presented in Table 4. With the exception of TLI, each of the overall goodness of fit indices suggests the model fits the data fairly well. Standardized correlation estimates and regression weights are presented in Figure 6. As shown in Figure 6, interactional fairness and distributive fairness are significant predictors of participants' perception of overall fairness. Overall fairness then has a significant positive effect on participants maximum acceptable write-down amount. This provides some evidence that management's perceptions of fairness influence their level of defensiveness and audit-related decisions when interacting with auditors. There is also a significant correlation between procedural fairness and interactional fairness. This is consistent with theory in which each of the components of fairness can influence the other components (Lind 2001).

It is also important to note that procedural fairness is not a significant predictor of overall fairness in this setting. In this model, procedural fairness is comprised of participants questions regarding the fairness of auditing standards. One potential explanation for the lack of observed results is the general view of participants that the auditing standards are relatively fair. In fact, participants strongly agreed (mean=8.15) that auditing standards are fair which is significantly greater than the scale midpoint ($p<0.001$). System Justification Theory (Jost & Banaji 1994) argues that people tend to perceive systems that they operate within to be just and legitimate (Lind 2001) and this perception tends to hold if people are not treated differentially. This could explain why my auditor opinion option manipulation did not have the intended effect on perceptions of fairness or management behavior.

CHAPTER 5

CONCLUSIONS

In my study, I examine a potential contributor to the observed association between integrated audits and lower financial reporting quality, compared to FS-only audits (Bhaskar et al. 2019; Lennox and Wu 2022). Based on FHT, I expect management to view the pass/fail nature of ICFR audits that exclude the option for the auditor to issue a qualified opinion as unfair resulting in them taking more defensive positions during the audit compared to if the auditor had the option to issue a qualified opinion. I expect this defensiveness to result in a reluctance to disclose internal control issues that are relevant to investors and in management taking more aggressive accounting positions, which ultimately diminishes financial reporting quality. I also explore a mechanism auditors could use to mitigate management's defensiveness.

To explore this possibility, I utilize an experiment where participants with financial reporting experience indicate their likelihood to agree to a material weakness conclusion in the audit of ICFR and indicate how they would respond to a PPE obsolescence issue. I manipulate whether the auditor can issue a qualified opinion (compared to no option to issue a qualified opinion) for the audit of ICFR and whether the auditor acts in a client-focused manner (compared to an audit team-focused manner). Results do not support my expectation that managers will perceive the absence of an option to issue a qualified opinion on ICFR (i.e., current regulations) as unfair and, thus, there is no observed difference in management's willingness to agree to a material weakness or in management's financial reporting decisions. Additionally, participants did not perceive my manipulation of client-focused behavior as any more or less helpful to them, resulting in no significant impact on management judgments.

Additional analyses do provide some support that management's defensiveness toward an auditor is influenced by their perceptions of fairness during an audit. I find that participants who view a partner as working more on their behalf (as compared to a partner who is working less on their behalf) are more willing to agree to a material weakness conclusion related to an ICD. Additionally, path analyses show management's maximum acceptable write-down for a PPE obsolescence issue is positively associated with their perceptions of overall fairness.

This study should be of importance to regulators and standard setters. AS 2, which removed the option for the auditor to issue a qualified opinion on the audit of ICFR, was initially widely opposed by management and accounting firms. This study shows that auditing standards can come to be viewed as fair over time, which may be due to people's tendency to view systems within which they operate to be fair. This experiment is timely as the U.K. is currently in the process of reforming the auditing function and is specifically considering implementing audit of ICFR standards similar to those in effect in the U.S (Brydon 2019).

Separately, this study explores perceived fairness as a mechanism auditors might consider as they interact with client contacts. My results show that perceptions of interactional fairness are associated with management's financial reporting decisions and ultimately financial reporting quality. In my study, I focused on the rationale for a change in timing of when internal control testing is performed. Results suggest the manipulation was not strong enough to significantly impact perceptions of fairness, but there could be other mechanisms that auditors or academics can identify that impact management's judgments. With that said, it is important for auditors to consider the appropriateness of any client-focused behavior implemented, especially from an independence perspective. Considerations of the perceptions of fairness could inform other common audit contexts such as auditor-client negotiations or coordination with an audit firm national office during consultations.

FIGURE 1

Fairness Heuristic Theory Conceptual Model

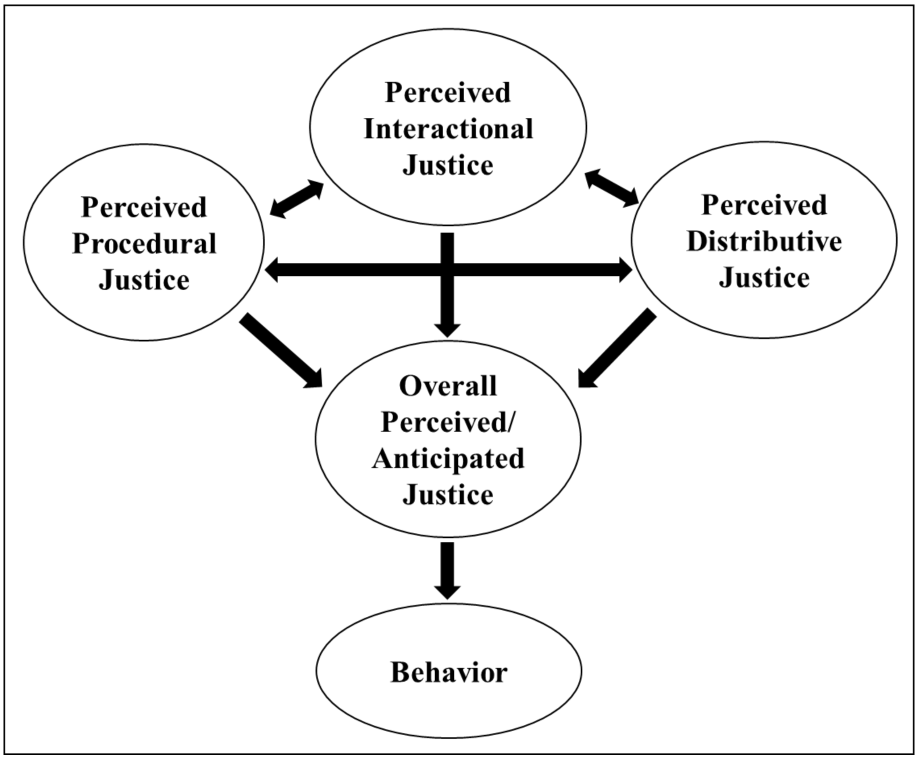


FIGURE 2

Internal Control Severity Assessment – Predicted Results

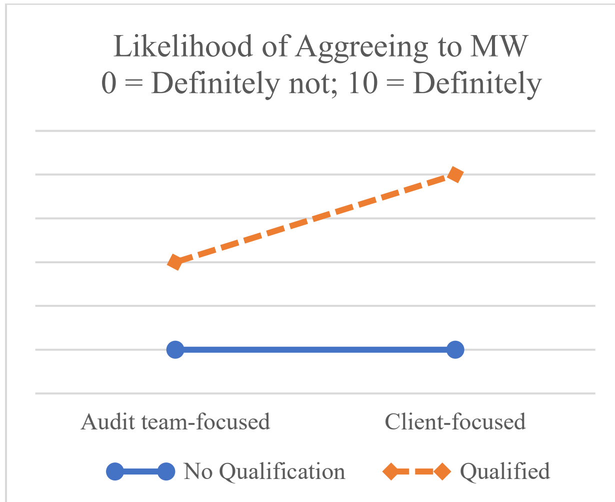


Figure Notes - Participants' Likelihood of agreeing to MW is captured on an 11-point scale from 0 (Definitely would not agree) to 10 (Definitely would agree). ICFR Reporting Options is manipulated as either the auditor is allowed to issue a qualified opinion on the audit of ICFR (indicated as *Qualified*) or they are not allowed to issue a qualified opinion (indicated as *No Qualification*). Focus of Auditor Behavior is manipulated as either *client-focused* or *audit team-focused*. In the client-focused conditions, the auditor performs interim control testing with the intention of allowing management time to remediate deficiencies. In the audit team-focused conditions, the auditor performs interim control testing with the intention of reducing audit effort after year-end.

FIGURE 3

Internal Control Severity Assessment – Model

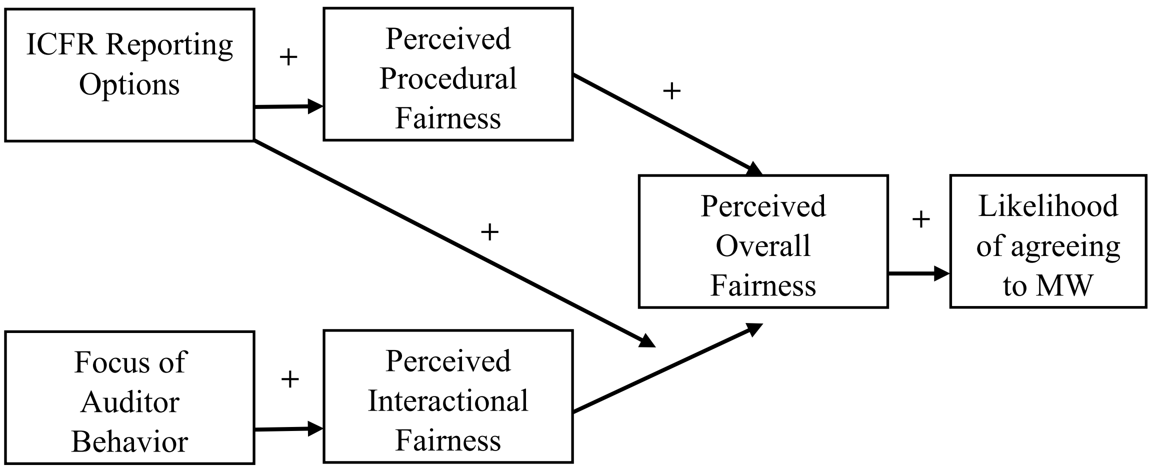


Figure Notes - Participants' Likelihood of agreeing to MW is captured on an 11-point scale from 0 (Definitely would not agree) to 10 (Definitely would agree). ICFR Reporting Options is manipulated as either the auditor is allowed to issue a qualified opinion on the audit of ICFR (indicated as *Qualified*) or they are not allowed to issue a qualified opinion (indicated as *No Qualification*). Focus of Auditor Behavior is manipulated as either *client-focused* or *audit team-focused*. In the client-focused conditions, the auditor performs interim control testing with the intention of allowing management time to remediate deficiencies. In the audit team-focused conditions, the auditor performs interim control testing with the intention of reducing audit effort after year-end. Perceived Procedural Fairness is measured as participants' perceptions of whether the auditing standards related to ICFR are fair on an 11-pt scale from -5 (Strongly Disagree) to +5 (Strongly Agree). Perceived Interactional Fairness is measured as participants' perceptions of whether interactions with the audit partner were intended to help the client on an 11-pt scale from -5 (Strongly Disagree) to +5 (Strongly Agree). Perceived Overall Fairness is measured as participants' perceptions of whether the audit of ICFR is fair on an 11-pt scale from -5 (Strongly Disagree) to +5 (Strongly Agree).

FIGURE 4

Plant, Property, and Equipment Obsolescence – Predicted Results

Figure Notes - Management Write-Down is the participant's initial proposed, preferred and maximum acceptable write-down amounts related to a PPE impairment decision. The amount is measured on a continuous scale from $0 (No adjustment) to $75.8 million (Full audit adjustment). ICFR Reporting Options is manipulated as either the auditor is allowed to issue a qualified opinion on the audit of ICFR (indicated as *Qualified*) or they are not allowed to issue a qualified opinion (indicated as *No Qualification*). Focus of Auditor Behavior is manipulated as either *client-focused* or *audit team-focused*. In the client-focused conditions, the auditor performs interim control testing with the intention of allowing management time to remediate deficiencies. In the audit team-focused conditions, the auditor performs interim control testing with the intention of reducing audit effort after year-end.

FIGURE 5

Plant, Property, and Equipment Obsolescence – Model

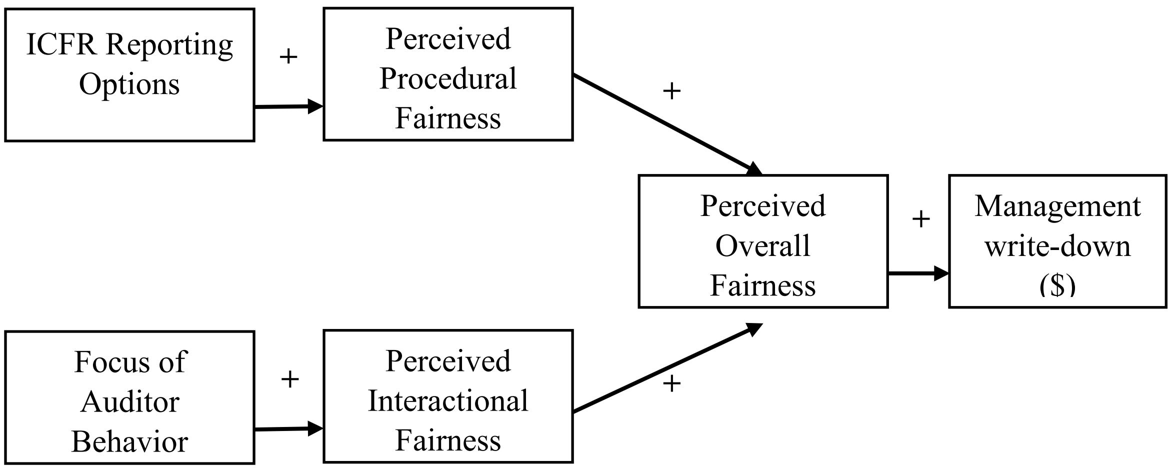


Figure Notes - Management Write-Down is the participant's initial proposed, preferred and maximum acceptable write-down amounts related to a PPE impairment decision. The amount is measured on a continuous scale from $0 (No adjustment) to $75.8 million (Full audit adjustment). ICFR Reporting Options is manipulated as either the auditor is allowed to issue a qualified opinion on the audit of ICFR (indicated as *Qualified*) or they are not allowed to issue a qualified opinion (indicated as *No Qualification*). Focus of Auditor Behavior is manipulated as either *client-focused* or *audit team-focused*. In the client-focused conditions, the auditor performs interim control testing with the intention of allowing management time to remediate deficiencies. In the audit team-focused conditions, the auditor performs interim control testing with the intention of reducing audit effort after year-end. Perceived Procedural Fairness is measured as participants' perceptions of whether the auditing standards related to ICFR are fair on an 11-pt scale from -5 (Strongly Disagree) to +5 (Strongly Agree). Perceived Interactional Fairness is measured as participants' perceptions of whether interactions with the audit partner were intended to help the client on an 11-pt scale from -5 (Strongly Disagree) to +5 (Strongly Agree). Perceived Overall Fairness is measured as participants' perceptions of whether the audit of ICFR is fair on an 11-pt scale from -5 (Strongly Disagree) to +5 (Strongly Agree).

FIGURE 6

Results of Path Analysis

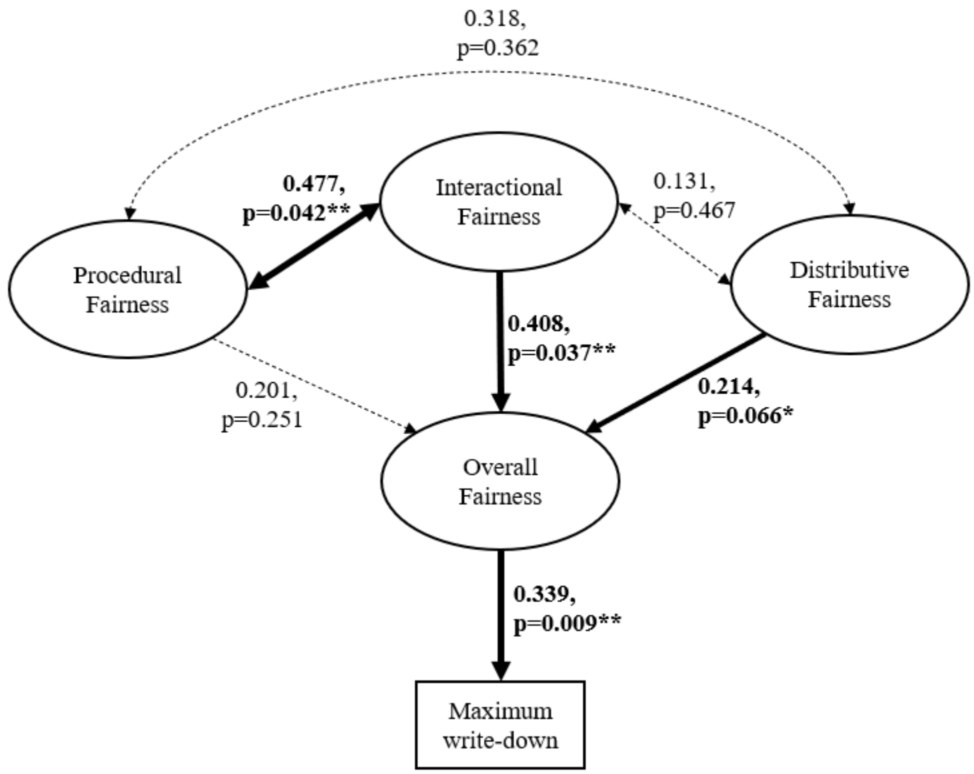


Figure Notes - Procedural Fairness, Interactional Fairness, Distributive Fairness, and Overall Fairness are individual factors comprised of questions indicated in Appendix B. Maximum acceptable write-down is the highest acceptable PPE obsolescence write-down amount measured on a continuous scale from $0 (No adjustment) to $75.8 million (Full audit adjustment). Standardized Coefficients and two-tailed p-values are indicated for each path. Significant paths are bolded. *, ** indicate significance at the <0.10 and 0.05 levels respectively.

TABLE 1

Self-reported Current Job Titles

Number of Participants	**Job Titles**
7	Chief Financial Officer/Chief Accounting Officer
4	Vice President of/Director of/Associate Director of Accounting
23	Controller
6	Assistant Controller
19	Senior Accountant/Manager of Accounting
3	Accountant/Accounting Specialist/Other, not specified

Table Notes – Participants were asked to provide their current job titles. Similar job titles are aggregated in the most applicable title included in the table.

TABLE 2

Likelihood to Agree to a Material Weakness

Panel A: Descriptive statistics – Mean (standard deviation) [n]

	Focus of Auditor Behavior		
ICFR Opinion Option	**Audit Focus**	**Client Focus**	**Row mean**
No Qualification	4.29	4.75	4.53
	(2.555)	(3.235)	(2.897)
	[14]	[16]	[30]
Qualified Available	4.19	4.94	4.56
	(2.880)	(3.395)	(3.121)
	[16]	[16]	[32]
Column mean	4.23	4.84	4.55
	(2.687)	(3.264)	(2.990)
	[30]	[32]	[62]

Panel B: Analysis of Variance

Source	Sum of Squares	df	Mean Square	F	p-value
ICFR Opinion Option	0.031	1	0.031	0.003	0.954
Auditor Focus	5.695	1	5.696	0.613	0.437
Opinion Option × Auditor Focus	0.315	1	0.315	0.034	0.855
Error	539.232	58	9.297		

Table Notes - Participants' Likelihood of agreeing to MW is captured on an 11-point scale from 0 (Definitely would not agree) to 10 (Definitely would agree). ICFR Reporting Options is manipulated as either the auditor is allowed to issue a qualified opinion on the audit of ICFR or they are not allowed to issue a qualified opinion. Focus of Auditor Behavior is manipulated as either client-focused or audit team-focused. In the client-focused conditions, the auditor performs interim control testing with the intention of allowing management time to remediate deficiencies. In the audit team-focused conditions, the auditor performs interim control testing with the intention of reducing audit effort after year-end. All tests are two-tailed.

TABLE 3

Initial, Preferred, and Maximum Write-Down Amounts for PPE

Write-down Measurement	NoQu/ Audit	NoQu/ Client	Qual/ Audit	Qual/ Client	Opinion Main[a]	Focus Main[a]	Opinion x Focus
Initial proposed	51.577 (13.021)	44.769 (9.647)	49.713 (14.400)	49.000 (12.733)	0.355	0.878	0.346
Preferred	47.750 (13.093)	40.619 (18.655)	44.631 (22.336)	46.306 (17.880)	0.393	0.719	0.352
Maximum	58.250 (14.435)	68.325 (11.259)	60.713 (14.998)	61.244 (16.556)	0.734	**0.077***	0.199

Table Notes - Management's write-down measurement is obtained across 3 judgments. Initial proposed is the initial write-down management would propose to the auditor related to a PPE impairment decision. Preferred is the ultimate write-down amount management would choose to agree on with the auditor. Maximum is the highest acceptable write-down amount. The amount is measured on a continuous scale from $0 (No adjustment) to $75.8 million (Full audit adjustment). The mean (standard deviation) is provided for each of the four experimental conditions. The "Opinion Main", "Focus Main", and "Opinion x Focus" columns provide the p-value for each main and interactive effect obtained by a two-way ANOVA on the indicated write-down measurement. [a]Reported p-values are one-tailed given directional predictions. *Indicates significance at the 0.01 level.

TABLE 4

Goodness of Fit Indices for Figure 6

Goodness of Fit Index	**Suggested Cut-off Criteria**	**Calculated Values**
Chi-squared / degrees of freedom	< 2 or 3	1.283
Comparative Fit Index	> 0.95	0.952
Tucker-Lewis Index	> 0.95	0.930
Incremental Fit Index	> 0.95	0.955
Root Mean Square Error of Approximation	0.06 to 0.08	0.068

APPENDIX A

OPINION PARAGRAPHS OF ICFR AUDIT OPINIONS

Unqualified Opinion of ICFR

We have audited, in accordance with the standards of the Public Company Accounting Oversight Board, XYZ Company's internal control over financial reporting as of December 31, 20X1, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). **In our opinion, XYZ Company has maintained, in all material respects, effective internal control over financial reporting** as of December 31, 20X1, based on the COSO criteria.

Qualified Opinion of ICFR

We have audited, in accordance with the standards of the Public Company Accounting Oversight Board, XYZ Company's internal control over financial reporting as of December 31, 20X1, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). **In our opinion, except for the effect of the material weakness described in the following paragraph on the achievement of the objectives of the control criteria, XYZ Company has maintained, in all material respects, effective internal control over financial reporting** as of December 31, 20X1, based on the COSO criteria.

Adverse Opinion of ICFR

We have audited, in accordance with the standards of the Public Company Accounting Oversight Board, XYZ Company's internal control over financial reporting as of December 31, 20X1, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). **In our opinion, because of the effect of the material weakness described in the following paragraph on the achievement of the objectives of the control criteria, XYZ Company has not maintained effective internal control over financial reporting** as of December 31, 20X1, based on the COSO criteria.

APPENDIX B

POST EXPERIMENTAL QUESTIONS

Participants are asked to indicate the extent to which they agree with the below questions on an 11-point scale from 0 (Strongly Disagree) to 10 (Strongly Agree).

<u>Overall Fairness</u>

- The audit of ICFR is fair to SalesTime Inc.
- Overall, the audit of ICFR is evenhanded.

<u>Procedural Fairness</u>

- The auditing standards allow for the auditor to conduct a fair audit.
- The auditing standards are unfair.
- The auditing standards are too restrictive.

<u>Interactional Fairness</u>

- The audit partner acted on your behalf.
- The audit partner treated you with respect.
- The audit partner considered your needs during the audit.

<u>Distributive Fairness</u>

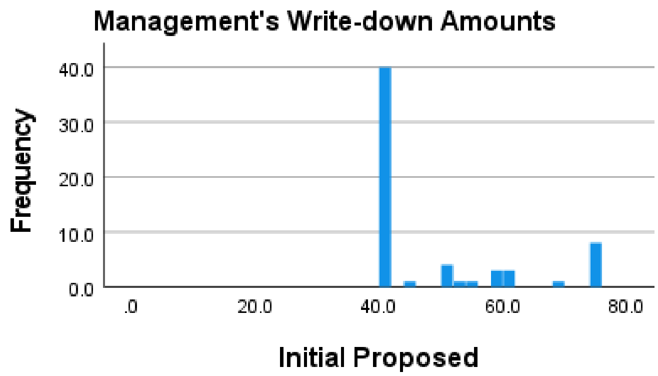
- I expect the outcome to reflect the effort the company put into maintaining internal controls.
- I expect the outcome to be justified, given the company's control deficiency.

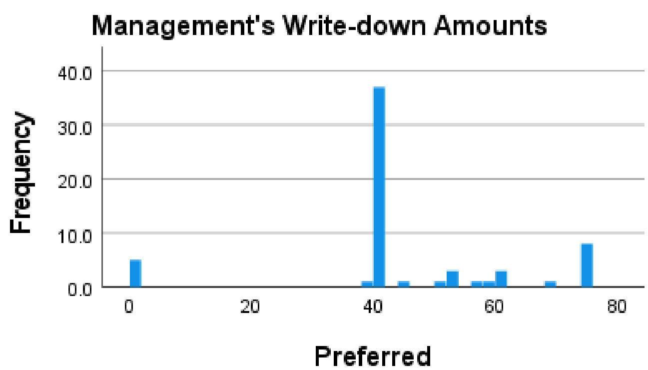
<u>Locus of Control</u>

- Many of the unhappy things in people's lives are partly due to bad luck. (Reverse coded)
- Becoming a success is a matter of hard work; luck has little or nothing to do with it.
- Most people don't realize the extent to which their lives are controlled by accidental happenings. (Reverse coded)
- There is really no such thing as "luck."

APPENDIX C

HISTOGRAMS OF MANAGEMENT'S WRITE-DOWN AMOUNTS





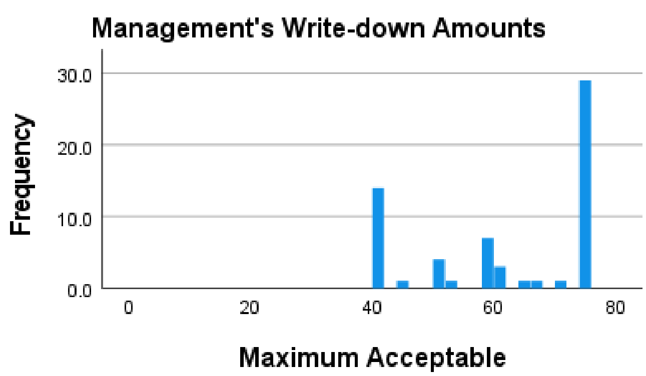


Chart Notes - Management's write-down measurement is obtained across 3 judgments. Initial proposed is the initial write-down management would propose to the auditor related to a PPE impairment decision. Preferred is the ultimate write-down amount management would choose to agree on with the auditor. Maximum is the highest acceptable write-down amount. The amount is measured on a continuous scale from $0 (No adjustment) to $75.8 million (Full audit adjustment).

APPENDIX D

CONSENT FORM FOR EXPERIMENT

You are being invited to participate in a research study titled "Management Judgments". This study is being done by Aubrey Whitfield, a PhD candidate from the University of Massachusetts Amherst. You were selected to participate in this study because of your financial reporting and audit-related experience.

Why are we doing this research study?
The purpose of this research study is to better understand the behavior of managers in audit-related settings.

Who can participate in this research study?
Business professionals with experience in a financial reporting setting and knowledge of internal controls over financial reporting.

What will I be asked to do and how much time will it take?
If you agree to take part in this study, you will be asked to complete an online survey/questionnaire. This survey/questionnaire will ask you to provide your judgments regarding various audit-related scenarios. It will take you approximately 20 minutes to complete.

Will being in this research study help me in any way?
You may not directly benefit from the findings of this research; however, we hope that your participation in the study will help researchers, regulators, and companies better understand the factors that affect managers' judgments.

What are my risks of being in this research study?
We believe there are minimal risks associated with this research study; however, a risk of breach of confidentiality always exists, though we have taken the steps to minimize this risk as outlined in a section below.

How will my personal information be protected?
To the best of our ability your answers in this study will remain confidential. We will minimize any risks by refraining from collecting any identify information. Responses to the study will be kept strictly confidential and will be analyzed after being aggregated with responses from other respondents. Collected data will be stored in a password protected online storage platform to which only the study author will have access.

Will I be given any money or other compensation for being in this research study?

There is no monetary compensation offered for participation of this study. However, in appreciation for your time we would like to send you a University of Massachusetts t-shirt. At the conclusion of the survey/questionnaire, you will be provided a link to an optional Qualtrics survey where you can provide an address for the t-shirt to be mailed.

What happens if I say yes, but I change my mind later?
You do not have to be in this study if you do not want to. If you agree to be in the study, but later change your mind, you may drop out at any time. There are no penalties or consequences of any kind if you decide that you do not want to participate.

Who can I talk to if I have questions?
If you have questions about this project or if you have a research-related problem, you may contact Aubrey Whitfield at awhitfield@umass.edu or 917-697-4799. If you have any questions concerning your rights as a research subject, you may contact the University of Massachusetts Amherst Human Research Protection Office (HRPO) at (413) 545-3428 or humansubjects@ora.umass.edu.

By clicking "I agree" below you are indicating that you are at least 18 years old, have read this consent form and agree to participate in this research study. You may print a copy of this page for your records.

I agree I do not agree

APPENDIX E

EXPERIMENTAL CASE

Exhibit 1

Screening Questions Screen

Before you begin, I would like to understand your accounting-related experience.

Please indicate which areas are currently part of your job responsibilities:
(Select all that apply)

- Budgeting Process
- Managerial or cost accounting
- Financial Reporting
- Tax accounting
- Accounting information systems
- None of the above

Do you have experience with internal controls over financial reporting (either as part of your current job or a previous job)?

- Yes
- No

Exhibit 2

Screening Questions Screen (continued)

In an integrated audit, the auditor **DOES NOT** provide assurance over which of the following?

- Financial Statements (i.e., Balance Sheet, Income Statement, Statement of Cash Flows, etc.)
- Notes to the financial statements
- Management's internal controls over financial reporting
- Management's annual budget

Next

Exhibit 3

Instructions Screen

Thank you for participating in this survey, which takes approximately 20 minutes to complete.

This research project examines manager decision making in the context of a public-company audit. You are to **assume that you are the Controller** of a company called **SalesTime, Inc.**

The following pages contain background information of SalesTime and common audit-related situations for which you will be asked to provide your judgment. We are only interested in your professional opinion.

Before you begin, you will be given a summary of current audit requirements of public companies, followed by questions to assess your understanding.

Click “Next” to begin.

Again, thank you for your participation!

Next

Exhibit 4

Regulations Background Screen

Current US Publicly Listed Company Audit Requirements

All publicly listed companies (with revenue greater than $100 million) in the US must be audited by an independent auditor that is registered with the Public Company Accounting Oversight Board (PCAOB).

As a reminder, the auditor of a public company is required to perform the following:

1. **Audit of the Financial Statements** - This includes providing an opinion on the relevant statements and schedules as determined by the SEC (i.e., Balance Sheet, Income Statement, Statement of Cash Flows, Statement of Stockholder Equity) and related notes to the financial statements. These financial statements are included as part of a company's "annual statements."
2. **Audit of Internal Controls over Financial Reporting** - This includes providing an opinion on whether controls are designed and operate such that a material misstatement would be prevented or detected and corrected before the financial statements are issued.

Next

Exhibit 5

Regulations Background Attention Check Screen

Current US Publicly Listed Company Audit Requirements

What opinion(s) is an auditor of a publicly listed company in the US required to issue?

Only an opinion on the Audit of the **Financial Statements**

Only an opinion on the Audit of **Internal Controls over Financial Reporting (ICFR)**

Opinions on BOTH the Audits of the **Financial Statements** and **Internal Controls over Financial Reporting (ICFR)**

No opinions are required to be issued

Next

Exhibit 6

Audit Opinion Background Screen

Financial Statement Audit

In general, for the financial statement audit, auditors can provide three types of opinions:

1. Unqualified (i.e., "clean") Opinion –indicates the financial statements are **presented fairly** in all material respects.
2. Qualified (i.e., "except for") Opinion – indicates the financial statements are **presented fairly** in all material respects, **"except for"** a specific account or disclosure that is not pervasive to the financial statements.
3. Adverse Opinion: indicates the financial statements are **not presented fairly**.

Note: An auditor can also choose not to provide an opinion, known as a Disclaimer of Opinion.

Next

Exhibit 7

ICFR Requirements Background Screen

Internal Controls over Financial Reporting

Management's responsibility:

- Management of a public company is required to implement a system of internal controls designed to prevent or detect and correct material errors in financial reporting.
- Management is also responsible for monitoring the operation of internal controls and to report on the effectiveness of the system of internal controls.

Auditor's responsibility:

- The auditor must issue an opinion on the design (whether controls will prevent or detect a material misstatement) and operating effectiveness (whether the controls operate as designed) of internal controls as of the end of the reporting period.

Next

Exhibit 8

ICFR Implications Screen

Internal Controls over Financial Reporting

What happens when a deficiency in internal controls is identified?

Management and the auditor must assess the severity of the deficiency.

A deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis.

The following are the 3 categories of deficiencies from most severe to least severe and the required actions for each:

	Deficiency Type	Definition	Required to be disclosed in the annual statements?	Required to be communicated to the Audit Committee?
Most Severe	Material Weakness	A deficiency, or a combination of deficiencies, such that there is a **reasonable possibility** that a **material misstatement** of the company's annual or interim financial statements will **not** be prevented or detected on a timely basis	✓	✓
	Significant Deficiency	A deficiency, or a combination of deficiencies, that is **less severe than a material weakness**, yet important enough to merit attention by those responsible for oversight of the company's financial reporting (i.e., the Audit Committee)		✓
Least Severe	Control Deficiency	A deficiency that does not rise to the level of a Significant Deficiency or Material Weakness		

Next

Exhibit 9

ICFR Implications Attention Check Screen

Internal Control over Financial Reporting

Which deficiency classification must be disclosed in the company's annual financial statements?
(Check all that apply)

Material Weakness

Significant Deficiency

Control Deficiency

None of the above

Next

Exhibit 10a

ICFR Opinion Screen

This screen is present in the qualified opinion option condition only.

Internal Controls over Financial Reporting

Assume that Auditing Standards permit auditors to provide three types of opinions on the audit of internal controls over financial reporting:

1. **Unqualified (i.e., "clean") Opinion** - indicates the system of internal controls **are effective** in all material respects.
2. **Qualified (i.e., "except for") Opinion** - indicates the system of internal controls **are effective, except for** a material weakness that is not pervasive to the financial statements.
3. **Adverse opinion** - indicates the system of internal controls **are not effective**.

Click on each button below to view an example of the auditor's opinion paragraph for each type of opinion.

▸ **Unqualified Opinion**

▸ **Qualified Opinion**

▸ **Adverse Opinion**

Next

Exhibit 10b

ICFR Opinion Screen

This screen is present in the no qualified opinion option condition only.

Internal Controls over Financial Reporting

Auditing Standards permit auditors to provide two types of opinions on the audit of internal controls over financial reporting:

1. **Unqualified (i.e., "clean") Opinion** - indicates the system of internal controls **are effective** in all material respects.
2. **Adverse opinion** - indicates the system of internal controls **are not effective**.

Click on each button below to view an example of the auditor's opinion paragraph for each type of opinion.

▸ **Unqualified Opinion**

▸ **Adverse Opinion**

Next

Exhibit 11

ICFR Opinion Dropdown Screen

The below is shown when participants click on the applicable buttons in the previous screen.

Unqualified Opinion

We have audited XYZ Company's internal control over financial reporting as of December 31, 20X1, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). **In our opinion, XYZ Company has maintained, in all material respects, effective internal control over financial reporting** as of December 31, 20X1, based on the COSO criteria.

Qualified Opinion

We have audited XYZ Company's internal control over financial reporting as of December 31, 20X1, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). **In our opinion, except for the effect of the material weakness described in the following paragraph on the achievement of the objectives of the control criteria, XYZ Company has maintained, in all material respects, effective internal control over financial reporting** as of December 31, 20X1, based on the COSO criteria.

Adverse Opinion

We have audited XYZ Company's internal control over financial reporting as of December 31, 20X1, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria).**In our opinion, because of the effect of the material weakness described in the following paragraph on the achievement of the objectives of the control criteria, XYZ Company has not maintained effective internal control over financial reporting** as of December 31, 20X1, based on the COSO criteria.

Exhibit 12

Company Background Screen

<u>SalesTime, Inc.</u>

Assume you are the Controller of SalesTime, Inc.

SalesTime, Inc. is a data analytics service provider focused on maximizing the sales potential for its clients. The company was founded in 2012 and produced software that was licensed to customers that could be installed at the client site.

Starting in 2015, the company began developing cloud-based services where direct installation of software at client locations is no longer required. An increase in employees working remotely accelerated the transition to using solely cloud-based analytics services with virtual customer service options.

SalesTime, Inc. is a publicly traded company (since 2016) and is subject to reporting requirements and audit requirements of a publicly listed company.

In general, you are the primary contact person for the audit partner when items of importance arise.

Next

Exhibit 13

Auditor Background Screen

Audit of SalesTime, Inc.

The audit of SalesTime, Inc. is performed by BigFour, LLP, who has been the company's auditor since the company went public in 2016.

Jordan Smith is the engagement partner assigned to the audit. Jordan has experience auditing technology service providers and has a reputation for being very competent.

The engagement team is simulatneously working on the ICFR and financial statement audits.

Next

Exhibit 14a

Auditor Focus Screen

This screen is present in the audit team-focus condition only.

Auditor Testing Strategy

Jordan Smith, the partner, passed you in the hall and suggested making a change to the timing of some audit work that would move work typically performed at year-end to months prior to year end.

Jordan will send you an email with the details.

Click next to view Jordan's email.

Next

Exhibit 14b

Auditor Focus Screen

This screen is present in the client-focus condition only.

Auditor Testing Strategy

Jordan Smith, the partner, passed you in the hall and suggested making a change to the timing of some audit work that would give SalesTime, Inc. an opportunity to fix control deficiencies identified during interim control testing and move work typically performed at year-end to months prior to year end.

Jordan will send you an email with the details.

Click next to view Jordan's email.

Next

Exhibit 15a

Auditor Focus Email Screen

This screen is present in the audit team-focus condition only.

To: Controller
From: Jordan Smith

Subject: **Proposed Adjustment to Timing of Audit Work**

Hi Controller,

As I mentioned earlier today, I would like to perform some internal control testing earlier in the year. If we adjust the timing of internal control testing, it will shift work done after year-end to earlier months that are not as busy.

We will still have to test some controls that operate in October, November, and December.

Let me know if you agree and I'll send over a timeline that can be communicated to your staff.

Regards,
Jordan Smith

Next

Exhibit 15b

Auditor Focus Email Screen

This screen is present in the client-focus condition only.

To: Controller
From: Jordan Smith

Subject: **Proposed Adjustment to Timing of Audit Work**

Hi Controller

As I mentioned earlier today, I would like to perform some internal control testing earlier in the year. If we adjust the timing of internal control testing, it will benefit you by giving you an opportunity to address control deficiencies that are identified earlier in the audit. It will also shift work done after year-end to earlier months that are not as busy.

We will still have to test some controls that operate in October, November, and December. But this change will let you address any issues we might find earlier in the year.

Let me know if you agree and I'll send over a timeline that can be communicated to your staff.

Regards,
Jordan Smith

Next

Exhibit 16a

Auditor Focus Confirmation Screen

This screen is present in the audit team-focus condition only.

You agreed that, by testing more controls in September, some time spent on the audit can be shifted to a less busy time.

You notified your staff that the audit timeline will change this year and some control testing will take place in September.

Next

Exhibit 16b

Auditor Focus Confirmation Screen

This screen is present in the client-focus condition only.

You agreed that, by testing more controls in September, the opportunity to identify and fix control issues earlier in the year is beneficial to your company and that some time spent on the audit can be shifted to a less busy time.

You notified your staff that the audit timeline will change this year and some control testing will take place in September.

Next

Exhibit 17

Interim ICFR Testing Update Screen

Results of Interim Control Testing Through September

Jordan provided an update on interim control testing through September, noting no issues to date.

Year-end control testing will continue in January.

Control Testing Update as of September 30		
		Action Items
Interim Controls Tested:	65	
Issues Identified:	0	N/A
Auditor Conclusion: Control testing through September is completed with no issues identified. As required by Auditing Standards, additional tests of controls will be performed for controls operating during the fourth quarter.		

Next

Exhibit 18

Year-End ICFR Testing Update Screen

Results of Internal Control Testing at Year-End

Assume it is now after the year-end. Another 35 controls were tested by the audit team.

Jordan notified you that a control deficiency in revenue recognition was identified that may rise to the level of a material weakness.

Control Testing Update as of January 31		
		Action Items
Interim Controls Tested	65	No issues noted
Year-end Controls Tested	35	
Issues Identified	**1**	Assess Severity
Auditor Conclusion: To be determined.		

The following screens provide some background and relevant information on the issue identified by the audit team.

Next

Exhibit 19

Control Issue Background Screen

Internal Control Issue – Background

- Management changed contract terms: In mid-October, management decided to offer a specified number of in-person training sessions in new sales contracts;
- The demand for the added training sessions exceeded expectations. Customers opted to include training sessions on almost all newly executed contracts;
- Each training session is a distinct performance obligation;
- Revenue should be allocated to each training session and recognized as each session occurs;
- Each contract is reviewed by the Financial Reporting Manager and Assistant Controller to ensure appropriate accounting and appropriate set-up in the accounting system.

Next

Exhibit 20

Control Issue Details Screen

Internal Control Issue - Details of the Control Failure

- The Financial Reporting Manager and Assistant Controller failed to identify the training sessions as a unique performance obligation;
- Revenue was not recognized as each training session was completed;
- No adjustment to revenue is needed as the reveneue that should have been recognized for training sessions approximated the amount recognized over the life of the contract;
- It is reasonably possible a misstatment could occur;
- The revenue associated with the new training sessions is material to the financial statements;
- There is the possibility the error would have been identified by management as part of the budgeting process performed in March, after the financial statements are issued.

Next

Exhibit 21a

Control Issue Implications Screen

This screen is present in the qualified opinion option condition only.

Internal Control Issue – Implications

Recall, management and the auditor must assess the severity of control deficiencies. For purposes of this case, the categories of deficiencies and auditor reporting requirements are as follows:

- **Material Weakness** – Results in an **adverse opinion (internal controls are not effective) or a qualified opinion (internal controls are effective "except for"…) depending on the pervasiveness** of the control deficiency. The deficiency must be communicated to the Audit Committee and to the public;
- **Significant Deficiency** – Results in an **unqualified opinion (internal controls are effective)**. The deficiency is communicated to the Audit Committee only; or
- **Control Deficiency** – Results in an **unqualified opinion (internal controls are effective)**. There is no requirement to communicate to the Audit Committee or the public.

Next

Exhibit 21b

Control Issue Implications Screen

This screen is present in the no qualified opinion option condition only.

Internal Control Issue – Implications

Recall, management and the auditor must assess the severity of control deficiencies. For purposes of this case, the categories of deficiencies and auditor reporting requirements are as follows:

- **Material Weakness** – Results in an **adverse opinion (internal controls are not effective)**. The deficiency must be communicated to the Audit Committee and to the public;
- **Significant Deficiency** – Results in an **unqualified opinion (internal controls are effective)**. The deficiency must be communicated to the Audit Committee only; or
- **Control Deficiency** – Results in an **unqualified opinion (internal controls are effective)**. There is no requirement to communicate to the Audit Committee or the public.

Next

Exhibit 22a

Likelihood of Agreeing to a Material Weakness Screen

This screen is present in the qualified opinion option condition only.

Internal Control Issue

Click on the below to review details on the control failure identified by the auditor.

‣ **Details of the Control Failure**

As a reminder, a Material Weakness control deficiency classification results in the auditor issuing either, a Qualified Opinion ("ICFR is effective, except for) or an Adverse Opinion ("ICFR are not effective").

If the auditor believes the deficiency rises to the level of a **material weakness**, how likely are you to agree with the auditor's assessment?

Definitely would NOT agree to a material weakness										Definitely would AGREE to a material weakness
0	1	2	3	4	5	6	7	8	9	10

Next

Exhibit 22b

Likelihood of Agreeing to a Material Weakness Screen

This screen is present in the no qualified opinion option condition only.

Internal Control Issue

Click below to review details on the control failure identified by the auditor.

▸ **Details of the Control Failure**

As a reminder, a Material Weakness control deficiency classification results in the auditor issuing an Adverse Opinion ("ICFR are not effective").

If the auditor believes the deficiency rises to the level of a **material weakness**, how likely are you to agree with the auditor's assessment?

Definitely would NOT agree to a material weakness										Definitely would AGREE to a material weakness
0	1	2	3	4	5	6	7	8	9	10

Next

Exhibit 23

Likelihood of Agreeing to a Material Weakness Screen

The below is shown when participants click on the applicable buttons in the previous screen.

▾ Details of the Control Failure

- The Financial Reporting Manager and Assistant Controller failed to identify the training sessions as a unique performance obligations;
- Revenue was not recognized as each training session was completed;
- No adjustment to revenue is needed as the revenue that should have been recognized for training sessions approximated the amount recognized over the life of the contract;
- It is reasonably possible a misstatement could occur;
- The revenue associated with the new training sessions is material to the financial statements;
- There is the possibility the error would have been identified by management as part of the budgeting process performed in March, after the financial statements are issued.

Exhibit 24

Control Deficiency Severity Assessment Screen

How would you classify the deficiency in your **public report** on the effectiveness of the system of internal controls?

Control Deficiency

Significant Deficiency

Material Weakness

On a scale from 0 to 10, indicate **how severe** you believe the deficiency to be.

Control Deficiency					Significant Deficiency					Material Weakness
0	1	2	3	4	5	6	7	8	9	10

Next

Exhibit 25

Financial Reporting Issue Notification Screen

Plant, Property, and Equipment (PPE) - New Accounting Issue

The auditors are continuing work on the ICFR audit and financial statement audit.

Assume you have now become aware of a potential accounting issue related to the valuation of Plant, Property, and Equipment.

Next

Exhibit 26

Financial Reporting Issue Background Screen

Plant, Property, and Equipment (PPE) Valuation - Background

As part of substantive testing for the financial statement audit, the auditor is concerned with the current valuation of PPE.

As previously noted, SalesTime transitioned solely to cloud-based operations. As part of this transition, the company upgraded much of its equipment to take advantage of faster computing speeds.

There is equipment held by SalesTime with a book value of $100.8 million that is being phased out and a write-down in value is necessay.

Next

Exhibit 27

Financial Reporting Issue Manager View Screen

Plant, Property, and Equipment (PPE) Valuation – Acquisitions Manager View

Position: In your discussions with the Acquisitions Manager, she approximates the value of the equipment to be around $60 million resulting in a proposed write-down of $40.8 million. This information has not been conveyed to the auditor.

Rationale:

- There is a secondary market to sell the equipment in the US;
- There is also potential to sell the equipment in developing countries. The Acquisitions Manager has not explored this option but is aware of the opportunity;
- The CEO recently approved a project to sell or dispose of the equipment in the most economically advantageous manner.

Next

Exhibit 28

Financial Reporting Issue Auditor View Screen

Plant, Property, and Equipment (PPE) Valuation – Auditor's View

Position: The auditor approximates the value of the equipment to be around $25 million resulting in a proposed write-down of $75.8 million.

Rationale:

- Similar to SalesTime, Inc., many other companies have also recently upgraded their equipment. The auditor expects the resale market will be flooded with similar types of equipment, which will lower resale value;
- Shipping costs are increasing which reduces the likelihood of selling the equipment overseas for a competitive price.

Next

Exhibit 29

Financial Reporting Write-Down Screen

Plant, Property, and Equipment (PPE) - Valuation

Recall, the auditor has identified $100.8 million of equipment being phased out due to upgrades.

Auditor's view: Write-down of $75.8 million.

Acquisitions Manager's view: Write-down of $40.8 million.

What is the **initial** write-down you would propose to the auditor?

$0 =
No audit adjustment

$75.8 Million =
Full audit adjustment

$0 $7.6M $15.1M $22.7M $30.3M $37.9M $45.5M $53.1M $60.6M $68.2M $75.8M

PPE Write-Down Amount in Millions

What is the write-down you would **prefer** to report in the financial statements?

$0 =
No audit adjustment

$75.8 Million =
Full audit adjustment

$0 $7.6M $15.1M $22.7M $30.3M $37.9M $45.5M $53.1M $60.6M $68.2M $75.8M

PPE Write-Down Amount in Millions

What is the **maximum** write-down you are willing to accept?

$0 =
No audit adjustment

$75.8 Million =
Full audit adjustment

$0 $7.6M $15.1M $22.7M $30.3M $37.9M $45.5M $53.1M $60.6M $68.2M $75.8M

PPE Write-Down Amount in Millions

Next

Exhibit 30

Post Experimental Questions Screen – Overall Fairness

The questions below refer to the audit of internal controls discussed in the earlier materials (i.e., the revenue internal controls issue). Indicate your level of agreement with the following statements:

The Audit of ICFR is **fair** to SalesTime, Inc.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

Overall, the Audit of ICFR is **evenhanded**.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

Next

Exhibit 31

Post Experimental Questions Screen – Additional Measures

I am **satisfied** with the auditor's performance.

Strongly Disagree | Strongly Agree

-5	-4	-3	-2	-1	0	1	2	3	4	5

I find the auditor to be **trustworthy**.

Strongly Disagree | Strongly Agree

-5	-4	-3	-2	-1	0	1	2	3	4	5

I find the auditor to be **competent**.

Strongly Disagree | Strongly Agree

-5	-4	-3	-2	-1	0	1	2	3	4	5

I am **happy** with the overall audit.

Strongly Disagree | Strongly Agree

-5	-4	-3	-2	-1	0	1	2	3	4	5

I am **frustrated** with the overall audit.

Strongly Disagree | Strongly Agree

-5	-4	-3	-2	-1	0	1	2	3	4	5

Exhibit 32

Post Experimental Questions Screen – Additional Measures (Continued)

The overall audit **helps** the company.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

The overall audit **harms** the company.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

Next

Exhibit 33

Post Experimental Questions Screen – Procedural Fairness

The questions below refer to the **auditing standards** the auditor in the case followed relating to the audit of **internal controls**. Indicate your level of agreement with the following statements:

The auditing standards allow for the auditor to conduct a fair audit.

Strongly Disagree | Strongly Agree

-5	-4	-3	-2	-1	0	1	2	3	4	5

The auditing standards are unfair.

Strongly Disagree | Strongly Agree

-5	-4	-3	-2	-1	0	1	2	3	4	5

The auditing standards are too restrictive.

Strongly Disagree | Strongly Agree

-5	-4	-3	-2	-1	0	1	2	3	4	5

Next

Exhibit 34

Post Experimental Questions Screen – Interactional Fairness

The questions below refer to the **interactions you had with the audit partner**, Jordan Smith. Indicate your level of agreement with the following statements:

The audit partner acted on your behalf.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

The audit partner treated you with respect.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

The audit partner considered your needs during the audit.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

Next

Exhibit 35

Post Experimental Questions Screen – Anticipated Fairness

The questions below refer to the **auditor's control deficiency assessment and related audit opinion you expect to receive** for the audit of ICFR. Indicate your level of agreement with the following statements:

I expect the outcome to reflect the effort the company put into maintaining internal controls.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

I expect the outcome to be justified, given the company's control deficiency.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

Exhibit 36

Post Experimental Questions Screen – Expected Outcome

What **severity classification** do you believe the auditor will conclude the internal control deficiency to be?

Material Weakness - a deficiency such that there is a reasonable possibility of a material misstatement. The deficiency must be communicated to the Audit Committee and to the public.

Significant Deficiency - a deficiency that is less severe than a material weakness but important enough to merit the attention of the Audit Committee. The deficiency is communicated to the Audit Committee only.

Control Deficiency - a deficiency that does not rise to the level of a Significant Deficiency or Material Weakness. There is no requirement to communicate to the Audit Committee or the public.

Next

Exhibit 37

Post Experimental Questions Screen – Locus of Control

Indicate your level of agreement with the following statements:

Many of the unhappy things in people's lives are partly due to bad luck.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

Becoming a success is a matter of hard work; luck has little or nothing to do with it.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

Most people don't realize the extent to which their lives are controlled by accidental happenings.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

There is really no such thing as "luck."

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

Next

Exhibit 38

Post Experimental Questions Screen – Conditional Outcomes

Assume the auditor concludes the control deficiency is a **Material Weakness**. Indicate the extent to which you agree with the following:

Overall, the Audit of Internal Control over Financial Reporting is **fair**.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

How harmful would a Material Weakness conclusion be to SalesTime, Inc.?

Not at all										To a very large extent
0	1	2	3	4	5	6	7	8	9	10

Assume the auditor concludes the control deficiency is a **Significant Deficiency**. Indicate the extent to which you agree with the following:

Overall, the Audit of Internal Control over Financial Reporting is **fair**.

Strongly Disagree										Strongly Agree
-5	-4	-3	-2	-1	0	1	2	3	4	5

Next

Exhibit 39

Post Experimental Questions Screen – Manipulation Checks

Recall the change in timing of internal control testing suggested by the audit partner, Jordan Smith. How much do you feel this change was **intended to help you**?

Not at all										To a very large extent
0	1	2	3	4	5	6	7	8	9	10

According to the options presented in this case, was there an option for the auditor to issue a Qualified Opinion on the Audit of Internal Controls over Financial Reporting?

Yes	No

Next

Exhibit 40

Post Experimental Questions Screen – Mood

Below are a number of words that describe different feelings and emotions. Read each item and indicate to what extent you feel this way right now.

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Interested	○	○	○	○	○
Upset	○	○	○	○	○
Strong	○	○	○	○	○
Guilty	○	○	○	○	○
Enthusiastic	○	○	○	○	○
Proud	○	○	○	○	○
Irritable	○	○	○	○	○
Determined	○	○	○	○	○
Distressed	○	○	○	○	○
Hostile	○	○	○	○	○

Next

Exhibit 41

Post Experimental Questions Screen – Demographics

What is your gender?

- Male
- Female
- Nonbinary/Nonconforming
- Prefer not to say

How old are you?

Years ________

Select your current job title:

- Manager Financial Reporting
- VP Financial Reporting
- Assitant Controller
- Controller
- CFO
- Other (please specify)

____

Exhibit 42

Post Experimental Questions Screen – Demographics (continued)

Is your current company public?

Yes

No

How many years of experience do you have working with your current company?

Years

How many years of financial reporting experience do you have?

Years

How many years of experience do you have working with a public company?

Years

What is the size of your current company in annual revenue?

Annual Revenue

Exhibit 43

Post Experimental Questions Screen – Demographics (continued)

Indicate your level of experience with audits of internal controls over financial reporting:

No prior experience										Dealt with this very often
0	1	2	3	4	5	6	7	8	9	10

Do you have prior experience as an Auditor?

No

Yes; please indicate number of years of experience

Please select any professional certifications you have:

CPA

Other (please specify)

None

Next

Exhibit 44

Thank You Screen

Thank you for your time spent taking this survey.
Your response has been recorded.

To show my appreciation, I would like to send you an Isenberg t-shirt.
If you are interested, click on the link below to provide your contact information.

Enter Contact Information Here

Exhibit 45

T-shirt Information Screen

Thank you again for completing the survey!

To show my appreciation, I'd like to send you an Isenberg t-shirt. If you would like to receive one, please indicate your t-shirt size and provide an address in the respective space below. If you have questions, you may contact me at awhitfield@umass.edu.

T-shirt size (men's sizes)

Shipping information:

Fist Name

Last Name

Mailing Address

City

State

Zip Code

→

Exhibit 46

Confirmation Screen

We thank you for your time spent taking this survey.
Your response has been recorded.

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