How do auditors’ use of industry norms differentially impact management evaluations of audit quality under principles-based and rules-based accounting standards?

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ABSTRACT

Interactions between auditors and client management affect audit quality on an engagement because those interactions influence and incentivize auditor behavior and decision-making. I perform an experiment using 191 management participants to investigate (1) whether an auditor’s use of professional judgment or industry norms to justify proposed adjustments increases management’s evaluation of audit quality, and (2) whether these evaluations differ under principles-based or rules-based standards. I find that, although management views industry norms to be more credible, they disregard an auditor’s justification method and evaluate audit quality based on underlying accounting attributes when reporting under a more rules-based standard, such as US GAAP. However, when an accounting standard is more principles-based, such as IFRS, using industry norms positively influences perceptions of audit quality. Thus, when standards are less precise, auditors are incentivized to engage in herding behavior by defaulting to industry norms when determining appropriate accounting treatments. This study increases our understanding of the incentives and motivations faced by auditors in their interactions with client management under both rules-based and principle-based accounting standards.

1. Introduction

Over the course of an audit engagement, an auditor is likely to find misstatements that get communicated to their client in the form of proposed adjustments (Choudhary et al., 2022). These proposed adjustments can begin a negotiation process that typically concludes when the adjustments are either recorded in the financial statements or are deemed by the auditor to be immaterial. As client management evaluates these proposed adjustments, they may consider factors such as the nature of the misstatement (e.g., discovered error vs. difference of opinion regarding an estimate), rationale for the adjustment (i.e., justification method used by the auditor), materiality, their own operating style (e.g., conservative vs. aggressive), and/or the level of precision in the accounting standards. In this paper, I investigate how two of these factors – an auditor’s use of a justification method and the level of precision in the accounting standards – impact management perceptions of audit quality.

Understanding management perceptions is important because auditors naturally respond to and are influenced by the relationships and interactions they have with their clients, and members of management can wield significant influence over current and future engagements. For instance, auditors have been shown to collect less evidence, and document their procedures more opaquely, when they perceive a social mismatch with management (Bennett & Hatfield, 2013), and they ask fewer follow-up questions when communicating electronically than face-to-face (Bennett & Hatfield, 2018). Carlisle et al. (2023) reveal that staff auditors are impacted by a perceived power imbalance relative to the client management personnel they interact with, which leads to actions that threaten the overall quality of the audit, such as client avoidance and ghost ticking. Auditor negotiations with a client involve interactions with management personnel, and this process requires auditors to consider client perspectives, manage relationships, and strategically determine how best to present information (for an example, see Sanchez et al. (2007)).

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1 Although auditors do not share specific levels of materiality with a client, client personnel have their own perceptions of what would be material to the financial statements.
Auditors may also be attuned to management evaluations of their work due to management’s role in the hiring and retention of auditors. Although audit committees are tasked with making the final decision about audit services for public companies in many countries, management still plays a vital role in the decision-making process. For example, the Center for Audit Quality (CAQ)’s External Auditor Assessment Tool (CAQ, 2019) mentions management feedback on the audit as an appropriate input for evaluating auditor performance. Fontaine et al. (2013) confirm that audit committees are in fact requesting this type of information, and they also find that companies are most likely to switch auditors when they feel the auditor-client relationship has been mismanaged. Additionally, Cohen et al. (2010, p. 752) find that even in a post-Sarbanes-Oxley era, many United States (US) auditors continue to perceive management as a “driving force behind auditor appointments and terminations”. Former Public Company Accounting Oversight Board (PCAOB) member Stephen Harris (2015, para. 32) remarked that auditors may have difficulty “maintaining an independent state of mind from a company’s management... given the inherent reality that the auditor is hired, paid, and evaluated by management”. Sampet et al. (2019) find that audit quality is associated with client satisfaction. Thus, auditors have significant incentives to maintain a positive relationship with management and shape management perceptions of audit quality, which in turn influences audit behavior and impacts actual audit quality.

One way auditors shape management perceptions is by strengthening the credibility of their own decisions. Decision credibility can be strengthened by the use of justification methods available to the auditor, such as an auditor’s own professional judgment or reference to established industry norms, though the degree of credibility gained from these methods may not be uniform across types and conditions. For instance, prior research found that the use of industry norms can shield auditors from juror negligence when imprecision in accounting standards is higher (Kadous & Mercer, 2012), and Koonce et al. (2015) find that the use of industry norms can protect companies from negative investor reactions when management involves the company in complex derivative usage.

The effectiveness of these justification methods may also differ depending on the precision of the accounting framework under which a company reports, especially if the lack of clear, bright-line rules introduces more ambiguity into the decision-making process. A differential effectiveness of accounting standard precision has implications for the use of the more principles-based International Financial Reporting Standards (IFRS) relative to the more rules-based US Generally Accepted Accounting Principles (GAAP). It may also provide insight to regulators and standard setters as they determine whether to make newly implemented standards more principles-based or rules-based in nature.

I use the Elaboration Likelihood Model (ELM), developed by Petty and Cacioppo (1986), to inform my predictions about how management will evaluate an auditor’s use of industry norms. The ELM states that individuals process persuasive communications through either a central or a peripheral route. Processing through the central route is more systematic and effortful; thus, it requires a higher level of ability and motivation. If motivation and/or ability are lacking, processing will occur through the peripheral route, which is characterized by the use of heuristics and is subject to a greater influence of bias. Management personnel are likely to be both sufficiently motivated and have the requisite ability to engage in systematic processing when evaluating auditor decisions. Therefore, I predict that management perceptions of audit quality will be driven primarily by an evaluation of the underlying accounting attributes\(^3\) of auditor decisions rather than by an auditor’s choice of justification method, which would function more as a heuristic device when better information is available. However, I do expect that decreasing the precision in the accounting standards will increase the ambiguity faced by management, leading them to increase their reliance on an auditor’s justification method.\(^4\)

I find evidence that, although management considers industry norms to be a higher quality justification method than professional judgment, they use the accounting attributes of a transaction rather than the justification method to evaluate auditors when information about those attributes is available. However, as precision in the accounting standards decreases, industry norms become more important in conveying higher audit quality to management. Therefore, when precision in the standards is low, auditors have a stronger incentive to fit transactions to an industry norm.

This study contributes to the accounting literature by providing important insights into the impact of auditors using different justification methods under varying levels of accounting standard precision, such as more principles-based IFRS versus more rules-based US GAAP. I demonstrate that management generally evaluates auditors on the underlying characteristics of their work, but as accounting standards become less precise, auditors may be incentivized to use industry norms as a substitute for standardized guidance. Although industry norms may help increase audit quality (as well as financial statement quality) if they are developed and deployed appropriately, audit quality may decrease if auditors are incentivized to encourage clients to inappropriately fit a transaction to a norm rather than determining a more appropriate treatment. This danger was realized in and around 2005 when at least 274 companies were forced to restate their financial statements based on a similar misapplication of leasehold accounting standards (Hyatt & Reed, 2007). In analyzing the factors leading to the restatements, Hyatt and Reed (2007, p. 81) conclude that the incorrect accounting practices arose from companies and auditors developing a “de-facto GAAP due to common industry practices”.\(^5\)

Thus, this potential for increased reliance on industry norms has important implications for the International Accounting Standards Board (IASB), the Financial Accounting Standards Board (FASB), and other governmental and regulatory bodies seeking to implement a more principles-based accounting framework, such as IFRS, or a more rules-based framework, such as US GAAP, or through convergence projects. One of the key arguments for a more principles-based framework is that it “enable[s] firms to better represent their underlying economics” (Becker et al., 2021, p. 14). However, if the presence of an industry norm leads auditors to apply an accounting standard inappropriately, then the opposite outcome may actually occur. This is especially true when considering these results in tandem with findings from juror participants, such as Kadous and Mercer (2012), who also find that auditors may have incentives to default to an industry norm when standards are less precise. With two potential evaluator groups providing incentives in a similar direction, the pressure on auditors to comply may become magnified.

The remainder of this paper is organized as follows: Section 2 reviews the background literature and develop the hypotheses, Section 3 describes the research design, Section 4 discusses the results of the analyses. Finally, Section 5 provides concluding remarks, including limitations of this study and opportunities for future research.

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\(^3\) I define underlying accounting attributes as the core features of a transaction that determine how it should be recorded in the financial statements. For example, the underlying attributes of a lease transaction would include the lease term, economic life of the asset, lease payments, and existence of a purchase option.

\(^4\) Ambiguity is a component of ability under the ELM.

\(^5\) This is the herding effect described by Kadous and Mercer (2012).
2. Background and hypotheses development

An auditor’s work may be subject to evaluation by a number of different constituents, such as client management, audit committees, firm quality inspectors, regulators, investors, and jurors. Arnold Schilder, former chair of the International Auditing and Assurance Standards Board (IAASB), said “Different stakeholders are likely to have different views about what audit quality is and how it can be enhanced” (IAASB, 2011, p. 2). Understanding how each of these groups evaluates audit quality is important to fully understand the motivations and incentives that influence audit decisions.

Client management plays a central role in both the day-to-day work of an audit engagement and the decision to hire and/or retain an audit firm, and prior research has shown that auditors may change their behavior 1) based on perceptions of their relationship with management (Bennett & Hatfield, 2013), 2) when they are in the last year of an audit that is subject to mandatory rotation (Wang & Tuttle, 2009), and 3) when they have lengthy relationships with a client (Garcia-Blandon & Argiles, 2015). Additionally, one of the arguments against allowing auditors to provide non-audit services for their audit clients is that providing these additional services can “create a unique bond of trust between the [audit firm] and management, which may result in insufficiently objective testing of transactions” (Meuwissen & Quick, 2019, p. 3). Despite the importance of this relationship, little research is devoted to how specific auditor engagement decisions impact management perceptions of audit quality.⁶

Conversely, the litigation stream of accounting research has identified how specific auditor actions impact the perceptions of jurors/judges. By extending research from this stream of literature into the realm of auditor-management relationships, we can gain a more complete perspective of the incentives that auditors face.⁷ For instance, Kadous and Mercer (2012) find that jurors return fewer verdicts against an auditor when auditors’ decisions are consistent with an industry norm and the accounting standards are imprecise. If management perceptions of audit quality are affected in a manner similar to that of jurors, then auditor incentives for these behaviors are magnified. Alternatively, if management perceives these decisions differently from jurors, then the competing incentives may reduce the impact of the incentives faced from one or both groups based on the weight given by auditors to incentives from those groups.

2.1. The elaboration likelihood model

The ELM, as developed by Petty and Cacioppo (1986), provides a framework for understanding how individuals evaluate decisions, and Griffith et al. (2018) demonstrate its applicability in an accounting setting. The ELM suggests that persuasive messages⁸ are evaluated along either a central route or a peripheral route (see Fig. 1). The central route is used for systematic processing, which is more thoughtful and effortful, while the peripheral route is characterized by heuristic processing and relies more on external cues and mental shortcuts. In order to exert the extra effort required to engage in systematic processing, individuals must have both motivation and ability (collectively termed elaboration). If either of these characteristics is missing, individuals will use the less effortful heuristic processing, which can lead to lower quality decisions. Thus, management’s level of motivation and ability in evaluating proposed adjustments should be considered.

2.1.1. Motivation

Prior research in psychology suggests that management is likely to have sufficient motivation to engage in systematic processing. Petty et al. (1995) find that the most common determinant of motivation is the personal relevance of the message, and as relevance increases, individuals are more likely to process a message systematically (Chaiken, 1980; Petty et al., 1981). Management is responsible for preparing the financial statements, and many auditor-management interactions occur within the context of a role as co-creators of the financial statements (e.g., Antle & Nalebuff, 1991; see Saltzio (2012) for a review within the negotiation literature). Additionally, portions of management compensation, such as bonuses and stock options, are often dependent on the annual financial outcomes of a company. Thus, I expect management has sufficient motivation to evaluate auditor decisions systematically and that this motivation level is independent of auditor decisions.

2.1.2. Ability

Prior research suggests that management should usually, but may not always, have the appropriate level of ability to systematically process decisions.⁹ Ability has been widely studied in prior literature and can be classified into three general categories. Internal characteristics are those that relate to the individual tasked with processing a message. Examples of internal characteristics include technical ability and/or knowledge (Wood et al., 1985) and cognitive depletion (Sanbonmatsu & Kardes, 1988). Environmental characteristics relate to conditions that are external to the individual, and they include distraction (Festinger & Maccoby, 1964; Petty & Cacioppo, 1986) and level of relaxation/comfort (Petty et al., 1983). Message characteristics relate to the persuasive message itself, such as incomprehensibility and ambiguity (Ratneshwar & Chaiken, 1991), complexity (Cacioppo & Petty, 1989), and delivery speed (Moore et al., 1986).

2.2. Hypothesis 1: Impact of industry norms on management evaluations

Although factors in each of these categories may affect management’s ability to process systematically, auditors are unlikely to have much influence on the internal or environmental characteristics of a message. They are most likely to be exert some influence over message characteristics because much of the audit information that management evaluates is delivered or provided by the audit team. Examples of message characteristics studied in prior accounting literature include the use of electronic vs. face-to-face communication (Bennett & Hatfield, 2013, 2018) and the use of a reciprocity-based negotiation strategy when presenting a client with audit adjustments (Sanchez et al., 2007). The justification method for an adjustment may also influence management; for instance, an auditor’s use of industry norms may strengthen the credibility of a message and provide a basis of comparability with peer companies. Additionally, the use of industry norms can be a protection against potential future litigation, as Kadous and Mercer (2012) show that jurors view audit quality as being higher when auditors justify a decision using an industry norm when accounting standards are imprecise.

Despite potential incentives to use industry norms as a default choice on engagements, auditors are expected to use their professional judgment at all stages of an audit (American Institute of Certified Public Accountants (AICPA), 1972). Although using an industry norm as an

⁶ Carcello et al. (1992) and Boyle and Cannon (2023) survey members of management for their perspectives on audit quality; however, responses in both studies relate more to high-level auditor behaviors.

⁷ Jurors and management do not constitute the whole population of groups that evaluate audit quality. A complete understanding of auditor incentives would include any additional evaluator groups, such as audit committees and regulators.

⁸ In this paper, I consider the persuasive message to be some signal of audit quality that the auditor desires to send to management. To operationalize the persuasive message, I utilize an audit adjustment setting.

⁹ Ability, as used in the context of the ELM, encompasses more than just a measure of technical skills (Cacioppo & Petty, 1989; Moore et al., 1986; Petty & Cacioppo, 1986; Petty et al., 1983; Ratneshwar & Chaiken, 1991; Sanbonmatsu & Kardes, 1986).
additional piece of evidence may be appropriate at times, an auditor is expected to base a decision about the appropriateness of an accounting transaction primarily on the underlying accounting attributes of the transaction. If a manager is processing systematically, an industry norm may provide little to no additional information in determining an appropriate accounting treatment when circumstances dictate an alternate treatment. On the other hand, members of management have been shown to be susceptible to heuristic processing under certain circumstances (Burton et al., 2012), and if the auditor’s use of an industry norm drives management evaluations of audit quality, then management may be processing heuristically. Thus, management’s response to an auditor’s use of industry norms might be similar to that of jurors, which would increase the incentive for auditors to use industry norms as pseudo-authoritative guidance and/or as a substitute for professional judgment.

The first hypothesis is set up as a research design construct to show that, ceteris paribus, management views an auditor’s decision as more likely to be correct when the auditor justifies that decision with a reference to an industry norm rather than the auditor’s own professional judgment. In a situation in which management’s ability to process systematically is limited due to message characteristics (i.e., no substantive information about the underlying characteristics of a transaction is provided), management may assign more credibility to a decision based on an industry norm rather than professional judgment. H1 is stated as follows:

H1: Management will perceive auditors’ decisions as more (less) likely to be correct when that decision is justified by using an industry norm (professional judgment).

2.3. Hypothesis 2: Impact of accounting attributes on management evaluations

The second hypothesis focuses on decision evaluations that are more consistent with realistic auditor-client relationships. On an audit engagement, auditors provide a client with the rationale behind any proposed audit adjustments. With this information available, management is better able to process systematically, and their evaluation should be based primarily on the quality of the auditor’s interpretation of the underlying accounting attributes rather than the auditor’s choice of justification method. This outcome would be consistent with prior research that finds auditors — a group similar in background and experience to management personnel — are less likely to be affected by heuristics and biases as they perform more realistic tasks (Smith & Kida, 1991). My next two hypotheses are stated as follows:

H2a: When management evaluates an audit decision, management perceptions of audit quality will be driven by the underlying accounting attributes.

H2b: When management evaluates an audit decision, management perceptions of audit quality will not be driven by the auditor’s justification method.

2.4. Hypothesis 3: Impact of accounting standard precision on management evaluations

The US Sarbanes-Oxley Act of 2002 included a requirement for the US Securities and Exchange Commission (SEC) to undertake a study on adopting a more principles-based accounting framework. This requirement created an atmosphere for the global accounting community to seriously consider convergence of US GAAP and IFRS, and a 2002 Memorandum of Understanding between the IASB and FASB, known also as The Norwalk Agreement, set convergence goals related to making standards compatible and coordinating programs between the two standard setting bodies (IFRS Foundation, 2022). Against the backdrop of increasing convergence, Becker et al. (2021) identify a number of benefits that can arise from increasing standardization of accounting standards. These benefits include, but are not limited to, reducing information processing costs for users of financial information, lowering the cost of capital and reporting costs for companies, and increasing efficiency in standard setting.

Although these initial goals have not yet been fully realized, the process of convergence continues as the IASB and FASB continue to work together on joint projects (Barckow, 2021). For example, in recent years these two organizations have issued mostly converged standards related to revenue from contracts with customers, share-based payments, operating segments, and fair value measurements (Harris, 2022). They have also partially converged on guidance related to hedge accounting, earnings-per-share, business combinations, and leases, among other topics (Harris, 2022). While the US has not adopted IFRS as their governing framework, the nature of these converged standards indicate that the FASB is prioritizing the implementation of the standards that are more principles-based than current US GAAP. In theory, the nature of principles-based standards should allow

10 In the context of the ELM, this result could be interpreted in two ways. First, management may be processing along the heuristic path because the lack of provided information prevents them from having the ability to process systematically. Alternatively, management may be processing systematically and evaluating the only piece of available information in the most rational manner possible. As this hypothesis is for research design purposes only, and the type of processing used in this scenario is not central to the research question, I do not predict or try to measure which of the two explanations applies.

11 Similarly, Guiral et al. (2020) find that investors evaluate corporate social responsibility disclosures using a more systematic, as opposed to heuristic, processing method when those disclosures are material or negative. This provides additional support that experts, when given information that is realistic and important, are less likely to rely on heuristic devices.

12 ASC 606 is a good example of this principles-based shift in mindset. In contrast with prior guidance that included several bright-lines for recognizing revenue, ASC 606 provides a core principle, along with five steps for identifying a contract, that can be broadly applied to individual circumstances.
auditors and management to rely primarily on the underlying accounting attributes of a transaction when determining how best to record that transaction, because the added flexibility offered under the standard allows them to focus on the underlying economic substance rather than specific bright-line criteria. Klish et al. (2022) note improvements in financial reporting quality in the Middle Eastern and North Africa region after adoption of IFRS. De George et al. (2016, p. 898) summarize literature that identifies multiple benefits of IFRS adoption, including “(i) improved transparency, (ii) lower costs of capital, (iii) improved cross-country investments, (iv) better comparability of financial reports, and (v) increased following by foreign analysts.”

However, Singleton-Green (2015) highlights that the impact on actual accounting quality might not be so straightforward. In reviewing 20 studies related to IFRS adoption in the EU, he finds mixed evidence regarding whether this adoption has improved accounting quality.13 Wakil and Petruska (2022) find that IFRS adoption in Canada significantly improves accounting quality for smaller companies, but it has minimal impact on the accounting quality in larger companies. Additionally, there are some potential risks that come from the adoption of more principles-based standards. Leuz and Wysocki (2016) highlight that increased disclosure requirements in IFRS are often relied upon as a replacement for specific regulation for certain corporate activities. This can incentivize companies to inappropriately take advantage of the increased flexibility in the standards. This additional flexibility may also increase ambiguity in the decision-making process, which can lead management and auditors to look to sources outside of the standards for clarity in an attempt to reduce uncertainty and minimize liability.

Ambiguity is a message characteristic that may impact an individual’s ability to process systematically. For instance, He et al. (2020, p. 536) find that investor reliance on market sentiment, which is “unrelated to economic fundamentals”, is greater for companies that are more difficult to value. In a setting in which management is attempting to evaluate an auditor’s decision, a lack of precision in accounting standards may generate ambiguity about the correctness of an auditor’s proposed adjustment decision. Some imprecision has always been present in accounting standards, but rules-based standards are generally considered to be more precise than principles-based standards because they contain bright-line tests and additional implementation guidance, whereas principles-based standards rely more on overarching principles (Schipper, 2003).

Differences in accounting frameworks have been shown to influence management behaviors, as Jamal and Tan (2010) find that managers are more likely to make aggressive decisions when their company operates under a principles-based standard and their auditors have a rules-based mind-set. I expect that as precision in the standards decreases, ambiguity in the auditor’s message increases, which in turn increases management’s reliance on heuristic processing when evaluating auditor decisions. The increase in heuristic processing would likewise increase management’s reliance on the auditor’s justification method as an evaluative tool. Thus, as precision in the accounting standards decreases, the external credibility that is invoked by the auditor’s use of industry norms is likely to cause management to rate audit quality higher when an auditor justifies a decision using industry norms as compared to professional judgment. The third hypothesis is stated as follows:

\[ H3: \text{When accounting standards are less precise, management will rate audit quality higher when auditors justify a decision using industry norms rather than professional judgment.} \]

3. Research design

3.1. Participants

Participants were recruited using the accounting alumni database of a large research university in the western US. The initial email list contained 3,678 unique alumni, although potential candidates were invited to forward the request to acquaintances with similar educational and/or professional backgrounds. From that group, 125 email requests were returned as undeliverable. Initially, 373 (10%) potential candidates responded to the request for participation by opening a link to the experimental materials administered through Qualtrics. Once participants opened the link, they were asked a series of three screening questions designed to ensure they were not currently employed as an external auditor and had a professional background that included management experience.15 Of the initial responders, 82 were eliminated based on these pre-screen criteria and an additional 99 exited the experiment prior to answering the manipulation check questions, leaving a total of 192 potential usable responses. At the conclusion of the experiment, participants responded to a range of demographic questions designed to ensure there was appropriate randomization between conditions. There were no significant differences between conditions for any of the demographic characteristics except for a moderately significant difference in the reported years of professional work experience, which I included as a covariate in the analyses. Additionally, because individuals with prior experience as an external auditor may be more inclined to trust in the work of external auditors, I included that as a covariate. One participant did not answer any demographic questions and was dropped from the analyses; thus, the final sample includes 191 responses. Additional demographic information is available in Table 1.

3.2. Experimental setting

One common area of auditor interaction with management is the adjustment process. As auditors perform testwork, they are likely to encounter transactions that they believe are accounted for improperly (Choudhary et al., 2022).16 These transactions may result from clear-cut mistakes (e.g., invoices entered at an incorrect amount), differences in opinion about estimates (e.g., the client’s method for calculating the allowance for doubtful accounts), or disagreements about the appropriate interpretation of imprecise accounting standards (e.g., the classification of an investment as Level 2 or Level 3). The adjustment process is an oft-used experimental setting in the negotiation literature (see Salterio (2012) for a review of this stream of literature), and it provides an ideal setting to test my research question because it introduces a persuasive message (i.e., the proposed adjustment) in a situation that is familiar to management. When auditors present an adjustment, they may need to provide greater than normal transparency into the audit process in an attempt to convince management that the adjustment is necessary. The increased transparency provides additional data points for management to use in their evaluation. Finally, the adjustment process creates a situation in which auditors and management are, at least initially, in a conflicting position, which can help to generate a level of motivation for participants that is sufficient for systematic processing.

\[ \text{For purposes of this task, I defined management experience as someone who had responsibility over an aspect of the financial reporting process or who interacted with their employer’s external auditor in the normal course of business.} \]

\[ \text{Choudhary et al. (2022) find that 81% of public companies in their sample from 2005 to 2015 had at least one proposed audit adjustment.} \]
3.3. Experimental task

Participants are asked to make judgments regarding two related tasks. In both scenarios, participants imagine themselves in the role of a controller for their company and are asked to evaluate a proposed adjustment made by the company’s auditors.

3.3.1. Scenario 1

Scenario 1 is designed to test H1 by measuring a baseline perception when using industry norms as a justification method. Participants are informed that the auditor has proposed an audit adjustment over the allowance for doubtful accounts. Other than a generic overview, participants are not provided with the details related to the company’s calculation for the allowance, nor do the auditors provide any explanation for their proposed adjustment beyond a reliance on one of the justification methods (professional judgment or industry norms).

3.3.1.1. Independent and dependent variables. I employ a 2x1 between-subjects design with justification method (professional judgment, industry norms) as the independent variable. For the dependent variable,
participants are asked ‘What do you believe is the likelihood that the auditor’s decision to increase the allowance is correct’ on a six-point scale from ‘Definitely wrong’ (1) to ‘Definitely right’ (6).

3.3.2. Scenario 2

Following the completion of Scenario 1, participants are provided with a short training on lease classification that is tailored to either US GAAP’s Accounting Standards Codification (ASC) 840\footnote{This data was collected prior to the 2019 implementation of new lease guidance in the US.} or International Accounting Standard (IAS) 17. The primary distinction between ASC 840 and IAS 17 relates to the specificity of the criteria for determining a capital lease.\footnote{IAS 17 refers to this type of lease as a finance lease rather than a capital lease. In the experimental materials I use the term ‘finance lease’ for participants in the condition that uses IAS 17. For purposes of clarity, I use the term ‘capital lease’ throughout this paper to refer to non-operating leases under both ASC 840 and IAS 17.} ASC 840 lists four criteria that, should any be met, automatically require a lease to be classified as an operating lease. IAS 17 states instead that a lease must be classified as a capital lease if the lease substantially transfers the risks and rewards of ownership to the lessee. IAS 17 provides examples of criteria that may indicate this transfer has occurred, but none of these criteria are an automatic trigger for a capital lease classification.\footnote{The criteria in IAS 17 mirror the criteria in ASC 840.} Similar to Agoglia et al., (2011), I focus on criteria related to the lease term. Under ASC 840 (IAS 17), any lease with a term that is greater than 75% (for the major part) of the useful life of the asset must (may need to) be classified as a capital lease. The differences between these frameworks should cause the principles-based standard to be perceived as being less precise than the rules-based standard.

Participants are then instructed to act in the role of controller for their publicly-traded company, which manufactures medical devices such as X-rays and MRI scanners. The company is in the middle of their annual audit, and the audit manager is meeting with the controller to provide an update. As part of the update, the auditor presents the controller with three proposed adjustments. For the first two adjustments, participants are told that they agree with one and disagree with the other. These adjustments are included to reinforce that managers do not automatically need to agree with audit adjustments.

Participants are then provided with the details of significant operating leases that the company entered into during the year. The leases are structured to last for 62% of the useful life of the asset, but they contain a renewal option that is discounted at either 10% or 30% of the current market rental value at the time of renewal. The renewal options, if exercised, would increase the lease term to 76% of the useful life. The auditor disagrees with the company’s classification and is proposing an adjustment to classify the leases as capital leases. The auditor provides several reasons why the adjustment needs to be made and justifies these reasons using either professional judgment or industry norms.\footnote{The experiment is designed to ensure that the justification method used in Scenario 2 matches the one used by the auditors in Scenario 1.}

Finally, participants are asked to respond to dependent variable questions, as well as questions designed to test the effectiveness of the manipulations and to gather demographic information. At the conclusion of the instrument, participants are given an option to receive either a $10 Amazon gift card or to have a donation of $10 made on their behalf to one of several charitable organizations.

3.3.2.1. Independent and dependent variables. Scenario 2 uses a $2 \times 2 \times 2$ between-subjects design. The independent variables are justification method (professional judgment, industry norms), precision of accounting standard (less/more rules-based, less/more principles-based), and accounting attributes (conservative, aggressive).\footnote{The accounting attributes of conservative and aggressive are labelled from the perspective of the client’s initial classification of the lease as an operating lease. Thus, the choice to classify a lease as operating when it contains a renewal option with a 10% discount is more conservative than when it contains a 30% discount.} Participants are randomly assigned to one of the eight cell conditions. For the dependent variables, participants are asked to rate their level of agreement with the auditor’s decision to require the change in lease classification and their evaluation of the audit quality provided by the auditors. Appendices A-C provide excerpts from the experimental materials that demonstrate the implementation of the manipulations.

4. Results

4.1. Pilot testing

Pilot testing was conducted to ensure the manipulations were well understood and effective. The initial round of pilot testing involved reviewing the materials with individuals in the auditing and accounting industry: one partner at an international accounting firm with extensive experience in classifying leases, one international controller for a private company, and one manager at a local CPA firm. These individuals ensured the setting was realistic, the terminology was not company- or firm-specific, and none of the materials were unnecessarily dense or difficult to understand. Additionally, to determine the appropriateness of the accounting attributes manipulation, I asked several partners of large, international accounting firms what percentage discount on a lease renewal option would be necessary to be classified as a bargain renewal. Responses ranged from 15 to 25%; thus, my manipulations of 10% and 30% appear to be reasonable. The full instrument was then tested first on a pilot group of students, and then on a group of Amazon Mechanical Turk workers, to ensure the materials were understandable and accessible.

4.2. Manipulation checks

After completing the main tasks, participants were asked to answer five questions relating to the manipulations, such as the accounting framework under which the company operated and the lease classification criteria. Each manipulation check question was answered correctly by at least 90% of the participants. I also asked participants to rate the inherent flexibility provided by the accounting standard, and participants rated the principles-based standard as significantly more flexible ($F = 3.98, p = 0.024$, one-tailed; not tabulated). Thus, the manipulations appear to be effective.

4.3. Scenario 1

Scenario 1 is designed to test H1, which sets a baseline for the persuasiveness of industry norms as compared to professional judgment. I perform an analysis of covariance (ANCOVA) using justification method as the independent variable, likelihood that the auditor was correct as the dependent variable, and years of work experience and experience as an external auditor as covariates. Auditors who justified their decision using an industry norm were seen as more likely to be correct ($F = 15.14, p = 0.001$, one-tailed). Thus, I find support for H1 (see Fig. 2 and Table 2).
Hypothesis 1 results.

Table 2

Hypothesis 1 results for likelihood that auditor decision is correct.

Table: 2. Hypothesis 1 results for likelihood that auditor decision is correct.

Notes: * Participants were asked to rate the likelihood that the auditor’s decision to propose an adjustment to the client’s preferred treatment for the allowance for doubtful accounts on a six-point scale from ‘Definitely wrong’ (1) to ‘Definitely Right’ (6). b Participants were randomly assigned to one of two conditions. Participants in the professional judgment condition were informed that the auditor’s decision to propose an adjustment was based on the audit manager’s own professional judgment and expertise. Participants in the industry norms condition were informed that the auditor’s decision to propose an adjustment was based on a comparison with other companies in the same industry.

4.4. Scenario 2

Hypotheses 2 and 3 are tested using Scenario 2. H2a and H2b predict that when management is able to evaluate audit decisions in a more realistic setting, management will focus on the accounting attributes of the auditor’s decision rather than the justification method. I measure management’s evaluation of the auditor using two dependent measures: likelihood that the auditor was correct to propose a misstatement and perceived audit quality. I perform ANCOVAs using each as the dependent variable, with justification method and accounting attributes as the independent variables and years of work experience and experience as an external auditor as covariates.

When using likelihood that the auditor was correct as the dependent variable, I find no interaction (F < 0.01, p = 0.993, two-tailed), nor do I find the justification method to be significant (F = 1.34, p = 0.249, two-tailed). I do find that the accounting attributes factor is significant, as auditors who proposed an adjustment for the more aggressive accounting treatment were rated as more likely to be correct (F = 3.39, p = 0.034, one-tailed). I find the same results when audit quality is the dependent variable, as neither the interaction (F = 0.35, p = 0.557, two-tailed) nor the justification method (F = 0.92, p = 0.338, two-tailed) are significant, but the accounting attributes variable is significant (F = 4.42, p = 0.019, one-tailed). Results support both H2a and H2b (see Fig. 3 and Table 3).

H3 predicts that when the precision of an accounting standard is lower (i.e., more principles-based), an auditor’s use of an industry norm will lead to higher perceptions of audit quality. Using those participants in the less precise condition, I perform ANCOVAs with justification method as the independent variable and the same two dependent variables from H2: likelihood that the auditor was correct to propose a misstatement and perceived audit quality. I find both to be significant (likelihood that the auditor is correct (F = 2.40, p = 0.063, one-tailed); perceived audit quality (F = 3.89, p = 0.026, one-tailed)) (see Fig. 4 and Table 4). Thus, I provide evidence in support of H3 that industry norms appear to increase perceptions of audit quality when accounting standards are less precise.

Although not hypothesized or tabulated, I perform the same analysis with the accounting attributes variable (i.e., conservative vs. aggressive) included. Neither the interaction term nor the attributes variable is significant, indicating that an auditor’s use of an industry norm increases perceptions of quality regardless of the aggressiveness of management’s initial decision. I also perform the analysis on the responses from only those in the rules-based condition and find that the justification method has no significant overall impact for either dependent variable. This provides further support that the auditor’s use of an industry norm is only helpful when accounting standards are less precise.

Table 2

Hypothesis 1 results.

Panel A: Descriptives for credibility of auditor’s decision to propose an adjustment.

<table>
<thead>
<tr>
<th>Justification Method</th>
<th>Professional Judgment</th>
<th>Industry Norms</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.26</td>
<td>3.80</td>
<td>3.52</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.96</td>
<td>0.92</td>
<td>0.98</td>
</tr>
<tr>
<td>N</td>
<td>n = 97</td>
<td>n = 94</td>
<td>n = 191</td>
</tr>
</tbody>
</table>

Panel B: ANCOVA on credibility of auditor’s decision to propose an adjustment.

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justification method</td>
<td>1</td>
<td>13.13</td>
<td>13.13</td>
<td>15.14</td>
<td>0.001*</td>
</tr>
<tr>
<td>Years work experience</td>
<td>1</td>
<td>0.04</td>
<td>0.04</td>
<td>0.05</td>
<td>0.483</td>
</tr>
<tr>
<td>External audit experience</td>
<td>1</td>
<td>4.78</td>
<td>4.78</td>
<td>5.51</td>
<td>0.020</td>
</tr>
<tr>
<td>Error</td>
<td>187</td>
<td>162.19</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: * one-tailed. a Participants responded to the question ‘What do you believe is the likelihood that the auditor’s decision to increase the allowance is correct’ on a scale from 1 (Definitely wrong) to 6 (Definitely right). b The auditors based their explanation for recommending an adjustment based either on the ‘audit manager’s own professional judgment and expertise’ [professional judgment] or ‘on a comparison with the allowances of other companies in the same industry’ [industry norms].
Fig. 3. Hypothesis 2 results for likelihood that auditor decision is correct and evaluation of audit quality. Notes: a Participants were asked to rate the likelihood that the auditor’s decision to propose an adjustment to the client’s preferred treatment for a set of leases on a six-point scale from ‘Definitely wrong’ (1) to ‘Definitely Right’ (6). b Participants were asked to rate the quality of the auditor’s work on a six-point scale from ‘Extremely low quality’ (1) to ‘Extremely high quality’ (6). c Participants were randomly assigned to one of two conditions. Participants in the professional judgment condition were informed that the auditor’s decision to propose an adjustment was based on the audit manager’s own professional judgment and expertise. Participants in the industry norms condition were informed that the auditor’s decision to propose an adjustment was based on a comparison with other companies in the same industry. d Participants were randomly assigned to one of two attributes conditions. In the conservative condition, the client’s initial lease classification decision was conservative based on an available lease renewal option with a discount of 10%. In the aggressive condition, the client’s initial lease classification decision was aggressive based on an available lease renewal option with a discount of 30%.

Table 3: Hypothesis 2 results.

Panel A: Descriptives [Mean (St. Dev.)] for Likelihood that Audit Decision is Correct

<table>
<thead>
<tr>
<th>Management Aggressiveness</th>
<th>Justification Method</th>
<th>Conservative</th>
<th>Aggressive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Professional judgment</td>
<td>3.74 (1.23)</td>
<td>4.05 (1.17)</td>
<td>3.88 (1.21)</td>
</tr>
<tr>
<td></td>
<td>n = 54</td>
<td>n = 43</td>
<td>n = 97</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Industry norms</td>
<td>3.96 (1.15)</td>
<td>4.16 (1.03)</td>
<td>4.06 (1.08)</td>
</tr>
<tr>
<td></td>
<td>n = 45</td>
<td>n = 49</td>
<td>n = 94</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3.84 (1.18)</td>
<td>4.11 (1.09)</td>
<td>3.97 (1.15)</td>
</tr>
<tr>
<td></td>
<td>n = 99</td>
<td>n = 92</td>
<td>n = 191</td>
<td></td>
</tr>
</tbody>
</table>

Panel B: ANCOVA of the Likelihood that Audit Decision is Correct

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justification</td>
<td>1</td>
<td>1.63</td>
<td>1.63</td>
<td>1.34</td>
<td>0.249</td>
</tr>
<tr>
<td>Attributes</td>
<td>1</td>
<td>4.13</td>
<td>4.13</td>
<td>3.39</td>
<td>0.034*</td>
</tr>
<tr>
<td>Justification * Attributes</td>
<td>1</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
<td>0.993</td>
</tr>
<tr>
<td>Years work experience</td>
<td>1</td>
<td>8.83</td>
<td>8.83</td>
<td>7.24</td>
<td>0.008</td>
</tr>
<tr>
<td>External audit experience</td>
<td>1</td>
<td>8.65</td>
<td>8.65</td>
<td>7.09</td>
<td>0.008</td>
</tr>
<tr>
<td>Error</td>
<td>185</td>
<td>225.60</td>
<td>1.22</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Panel C: Descriptives [Mean (St. Dev.)] for Evaluation of Audit Quality

<table>
<thead>
<tr>
<th>Management Aggressiveness</th>
<th>Justification Method</th>
<th>Conservative</th>
<th>Aggressive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Professional judgment</td>
<td>3.83 (1.06)</td>
<td>4.09 (1.17)</td>
<td>3.95 (1.11)</td>
</tr>
<tr>
<td></td>
<td>n = 54</td>
<td>n = 43</td>
<td>n = 97</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Industry norms</td>
<td>3.93 (1.18)</td>
<td>4.27 (1.08)</td>
<td>4.11 (1.13)</td>
</tr>
<tr>
<td></td>
<td>n = 45</td>
<td>n = 49</td>
<td>n = 94</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3.88 (1.11)</td>
<td>4.18 (1.12)</td>
<td>3.95 (1.12)</td>
</tr>
<tr>
<td></td>
<td>n = 99</td>
<td>n = 92</td>
<td>n = 191</td>
<td></td>
</tr>
</tbody>
</table>

Panel D: ANCOVA of Evaluation of Audit Quality

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justification</td>
<td>1</td>
<td>1.08</td>
<td>1.08</td>
<td>0.92</td>
<td>0.338</td>
</tr>
<tr>
<td>Attributes</td>
<td>1</td>
<td>5.16</td>
<td>5.16</td>
<td>4.42</td>
<td>0.019*</td>
</tr>
</tbody>
</table>
Table 3 (continued)

Panel C: Descriptives [Mean (St. Dev.)] for Evaluation of Audit Quality

<table>
<thead>
<tr>
<th>Management Aggressiveness</th>
<th>Conservative</th>
<th>Aggressive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justification * Attributes</td>
<td>1</td>
<td>0.40</td>
<td>0.40</td>
</tr>
<tr>
<td>Years work experience</td>
<td>1</td>
<td>7.06</td>
<td>7.06</td>
</tr>
<tr>
<td>External audit experience</td>
<td>1</td>
<td>8.68</td>
<td>8.68</td>
</tr>
<tr>
<td>Error</td>
<td>185</td>
<td>216.13</td>
<td>1.17</td>
</tr>
</tbody>
</table>

Notes: * One-tailed a Participants were asked ‘What do you believe is the likelihood that the auditor’s decision to change the lease classification is correct?’ on a scale from 1 (Definitely wrong) to 6 (Definitely right). b Participants were randomly assigned into one of two conditions. In the professional judgment condition, participants were informed that the auditor based their decision to recommend an adjustment on their own judgment and experience. In the industry norm condition, participants were informed that the auditor based their decision to recommend an adjustment based on a comparison with similar leases held by companies in the same industry. c Participants were randomly assigned into one of two conditions. In the conservative condition, the initial lease classification decision made by management was conservative based on the lease criteria. In the aggressive condition, the initial lease classification decision made by management was aggressive based on the lease criteria. d Participants were asked how they would ‘rate the quality of the audit work provided by the auditors on a scale from 1 (extremely low quality) to 6 (extremely high quality).’

Fig. 4. Hypothesis 3 results for likelihood that auditor decision is correcta and evaluation of audit qualityb under less precise accounting standardsc. Notes: a Participants were asked to rate the likelihood that the auditor’s decision to propose an adjustment to the client’s preferred treatment for a set of leases on a six-point scale from ‘Definitely wrong’ (1) to ‘Definitely Right’ (6). b Participants were asked to rate the quality of the auditor’s work on a six-point scale from ‘Extremely low quality’ (1) to ‘Extremely high quality’ (6). c Participants were randomly assigned to one of two conditions. Participants in the Less Precise conditions applied lease guidance from International Accounting Standard (IAS) 17. Participants in the More Precise condition applied lease guidance from Accounting Standards Codification (ASC) 840. d Participants were randomly assigned to one of two conditions. Participants in the professional judgment condition were informed that the auditor’s decision to propose an adjustment was based on the audit manager’s own professional judgment and expertise. Participants in the industry norms condition were informed that the auditor’s decision to propose an adjustment was based on a comparison with other companies in the same industry.

Table 4

H3 Results.

Panel A: Descriptives for Likelihood that Audit Decision is Correct

<table>
<thead>
<tr>
<th>Justification Methodb</th>
<th>Professional Judgment</th>
<th>Industry Norms</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.77</td>
<td>4.15</td>
<td>3.97</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>1.31</td>
<td>1.03</td>
<td>1.18</td>
</tr>
<tr>
<td>N</td>
<td>n = 43</td>
<td>n = 46</td>
<td>n = 89</td>
</tr>
</tbody>
</table>

Panel B: ANCOVA of the Likelihood that Audit Decision is Correct

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justification method</td>
<td>1</td>
<td>3.26</td>
<td>3.26</td>
<td>2.40</td>
<td>0.063a</td>
</tr>
<tr>
<td>Years work experience</td>
<td>1</td>
<td>2.34</td>
<td>2.34</td>
<td>1.72</td>
<td>0.193</td>
</tr>
<tr>
<td>External audit experience</td>
<td>1</td>
<td>1.02</td>
<td>1.02</td>
<td>0.75</td>
<td>0.389</td>
</tr>
<tr>
<td>Error</td>
<td>85</td>
<td>115.60</td>
<td>1.36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Panel C: Descriptives for Evaluation of Audit Qualityc

<table>
<thead>
<tr>
<th>Justification Methodb</th>
<th>Professional Judgment</th>
<th>Industry Norms</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.77</td>
<td>4.24</td>
<td>4.01</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>1.17</td>
<td>1.12</td>
<td>1.16</td>
</tr>
<tr>
<td>N</td>
<td>n = 43</td>
<td>n = 46</td>
<td>n = 89</td>
</tr>
</tbody>
</table>

(continued on next page)
4.5. Sensitivity analyses

To ensure my results were not sensitive to the decisions regarding which participants to include in my analyses, I performed the same ANCOVAs described above using a more restrictive set of participants (these results are untabulated). In the first set of analyses, I restricted my sample to only those participants who could answer affirmatively to both pre-screening questions related to managerial ability rather than to one or the other. This requirement ensures that the group of participants is comprised of individuals that are at higher levels of management and are more likely to have greater interaction with the audit teams. The second restriction I implemented was to require participants to answer all comprehension check questions correctly, which ensures that participants were attentive to all manipulations. These two restrictions resulted in a sample size of 121. With this smaller sample, I re-ran the analyses for each hypothesis. The results with this smaller group are consistent with the main results, though the reduction in power did cause some results to be weaker (i.e., significant at p < 0.10 rather than 0.05).

In the second set of analyses, I restricted my sample to those who self-reported themselves as in positions that could arguably be classified as upper-level management. I defined upper-level management as those who selected the following current job titles: Chief Executive Officer (CEO), Chief Financial Officer (CFO), Vice President (VP) of Finance, Director of Financial Reporting, Controller, and Accounting Manager. From those who selected the “Other” job title, I also judgmentally selected those who might reasonably be considered upper-level management. This resulted in a sample size of 117. Results from this sensitivity analysis were consistent with the primary analyses, and in many cases even more strongly significant, with one exception. For H3, when evaluating participants’ evaluation of likelihood that the audit decision was correct, results were directionally consistent but not at a significant level. Based on the results from both sets of analyses, my results hold for those in upper-level management positions who are most likely to have significant interactions with their auditors.

5. Conclusions

I find evidence that while management perceives industry norms to be a more highly credible justification method than professional judgment, they will evaluate audit quality based upon the underlying accounting attributes and not the justification method when precision in the accounting standards is high. On the other hand, with less precise accounting standards, management evaluates an audit decision as higher quality if the auditor justifies the decision using industry norms.

This study makes several contributions to the accounting literature. First, I inform regulators that auditors have an increased incentive to default to the use of industry norms when accounting standards become less precise. Regulators need to understand the impact of standard precision because as auditors are incentivized to default to the use of industry norms, these industry norms may develop into pseudo-authoritative guidance if auditors herd toward using norms as a shield to protect themselves from negative management (as well as juror) evaluations. This is especially relevant as the FASB and IASB continue to work together on standard setting convergence projects, as it helps to inform both parties about consequences of making standards more or less principles-based.

Second, these findings contribute to our understanding of the auditor-client relationship by increasing our understanding of how auditor decisions impact management perceptions of audit quality, which in turn provides greater insight into auditor incentives. Understanding auditor incentives is important because incentives drive behavior, and auditor behaviors impact the level of audit (and financial statement) quality. Relatedly, this study also highlights the importance of management and board member expertise as one method of reducing reliance on heuristic processing when evaluating financial information. The impact of experience may be tempered, however, when accounting standards are relatively more principles-based.

The main limitation of this study relates to the demographics of the participants and their familiarity (or lack thereof) with IFRS. Participants in this study were more familiar with US GAAP, and their unfamiliarity with IFRS may change how they evaluate audit quality in this scenario. The possibility remains that participants are more likely to use heuristic processing in the imprecise setting because they lack the same frame of reference as participants in the more precise setting. On the other hand, there is always a learning curve as new standards are adopted, and these findings may still be applicable as new standards are implemented.

Future research in this area may focus on recruiting participants that are familiar with IFRS to see if the results hold for participants with more familiarity with that framework. There are also other evaluators of audit quality, such as audit committee members, peer reviewers, and investors, who may impact audit decisions, and understanding their perceptions of audit quality will provide a more complete insight into auditor incentives. Additionally, other message factors, such as increased cognitive load, method of communication, or level of distraction, could inhibit an evaluator’s ability to process systematically and may have an effect on evaluations even when accounting standards are more precise. Finally, other justification methods, such as the use of firm decision aids or judgment frameworks, may have a differential impact on perceptions of audit quality.

Declaration of Competing Interest

The authors declare that they have no known competing financial

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22 Examples of job titles classified as upper-level management include Supervisor of Financial Reporting, Chief Internal Auditor, Chief Operating Officer (COO), and Director of Finance.
interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

Acknowledgements

This paper comes from my dissertation at the University of Utah. I wish to thank the members of my dissertation committee: Martha Eining (chair), Brian Cadman, David Plumlee, Don Wardell, and David Wood. I also wish to thank Jordan Lowe, Jeff Pickerd, Kip Holderness, and workshop participants from the 2014 AAA Western Region Doctoral Student Faculty Interchange, 2014 BYU Accounting Symposium, 2016 AAA Annual Meeting, Florida Atlantic University, The University of Cincinnati, and the University of Utah for their helpful comments. I appreciate Chris Agoglia for allowing me to review his experimental materials and use them as a foundation for the materials described herein. Finally, I appreciate the helpful feedback from two anonymous reviewers, as well as the editor, Robert K. Larson. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors. All errors are my own.

Appendix A. Precision manipulation

Participants in both conditions received a short primer, shown below, on the differences in lease accounting under either IFRS or US GAAP. The US GAAP training is presented first, with differences in the IFRS training indicated by the italicized text in brackets. Participants were also given a brief summary of the financial statement impacts of recording a lease as a capital/finance lease vs. an operating lease, and this summary was the same for all conditions.

Lease Criteria

In this section, you will evaluate a proposed audit adjustment. In order to complete this task, it is important that you understand the accounting standards related to lease classification under United States Generally Accepted Accounting Principles (U.S. GAAP) [International Financial Reporting Standards (IFRS)]. U.S. GAAP [IFRS] is generally considered to be a rules-based [principles-based] framework and is characterized by [a lack of] detailed guidance and specific bright-line tests for determining the appropriate accounting treatment for transactions. Thus, the focus is on correctly applying specific rules [overarching principles] to [specific] accounting transactions.

From a lessee’s perspective, all leases are classified as either capital [finance] or operating leases. Differences in these leases will be explained on a following page. Under U.S. GAAP [IFRS], a lease MUST be classified as a capital [finance] lease if it meets any one of four criteria (transfers substantially all of the risks and rewards of ownership). [The standard lists several criteria that MAY indicate this threshold has been met.]

For purposes of this study, only one criterion needs to be considered:

If the lease term is for the major part of the estimated economic life of the leased property, then the lease may need to be classified as a finance lease.

If the lease term is for the major part of the estimated economic life of the leased property, then the lease may need to be classified as a finance lease.

NOTE: A bargain renewal option is an option to renew a lease at a price sufficiently below market value such that the exercise of the option is reasonably assured at the date of the lease’s inception. The lease term includes the bargain renewal period. Not all renewal options are considered a bargain.

Appendix B. Attributes manipulation

All participants were provided the information below about a specific lease that was initially classified as an operating lease. All information is identical except for the percentage discount applied to the renewal option. The Aggressive decision is shown first, with the Conservative condition in brackets.

Lease Classification

The 3rd proposed audit adjustment relates to the classification of several leases that were entered into during the year. You will be asked to respond to this adjustment. The following is a description of the lease transactions:

On January 1, 2013, the Company entered into lease agreements for three identical machines that are used to manufacture MRI scanners. Due to the cost of the machines, these transactions have a significant impact on the company’s financial statements. The terms of the lease are as follows:

- Estimated economic life: 21 years
- Lease term: 13 years (62% of the estimated economic life)
- Annual lease payment: $600,000/month ($200,000 for each machine)
- Renewal option: At the end of the lease term, the company may extend the lease for 3 additional years.
  - If the option is exercised, the lease payment for the additional years will be at a discount of 30% [10%] below the market rental value of the equipment at that point in time.

After a thorough review of all relevant lease details, the Company determined that the lease should be classified as an operating lease. The Company’s senior management group feels very strongly that this is the appropriate classification. Additionally, management bonuses, including your own, are tied to the Company’s net income.

Appendix C. Justification method

Participants were told that the audit team disagreed with the initial classification of the lease, along with their reasoning and a justification method to support their reasoning. The professional judgment condition is presented below first, with the differences in the industry norm condition shown italicized and in brackets.

Note: The second bullet point used the term capital lease (finance lease) for those in the US GAAP (IFRS) condition.

Proposed Audit Adjustment #3

After reviewing the lease contracts, the auditors came to the following preliminary conclusions:

- The discount on the renewal option was large enough that it should be classified as a bargain renewal option.
- If the renewal option is classified as a bargain, the lease term covers 76% of the estimated economic life of the asset. The auditors believe this to be a large enough percentage that the lease should be classified as a capital lease.

Taylor explained that this decision was based on evaluating the terms of the lease using the professional judgment and experience of the audit team.

(Taylor explained that this decision was based on a comparison of the lease with similar leases held by companies in the same industry.)