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The Influence of Cognitive Factors on the Relationship between Accounting Standard Precision and Aggressive Financial Reporting

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Kara E. Hunter

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submitted in partial fulfillment of the
requirements for the degree of

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DEDICATION

To my husband, Rich, and my family for their unwavering support.

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Abstract

The Influence of Cognitive Factors on the Relationship Between Accounting Standard Precision and Aggressive Financial Reporting

Kara E. Dugas

Chair of the Supervisory Committee:
Rae D. Anderson Professor Jay C. Thibodeau, Ph.D., CPA
Department of Accountancy

The U.S. SEC has formally advocated for the creation of a single set of global accounting standards. As the SEC considers converging U.S. GAAP with IFRS, there is heightened interest in how the precision of accounting standard influences the quality of the financial reporting process. My dissertation consists of three studies that seek to address how accounting standard precision interacts with different behavioral factors to influence aggressive financial reporting decisions and auditor judgment.

Paper one presents evidence of a significant interactive effect of standard precision and preparer incentive horizon. Specifically, we find evidence that when the incentive horizon is long term, more precise standards are associated with decreased aggressive financial reporting. This is notable as it shows that the effects of standard precision are moderated by incentives and that standard precision cannot be fully understood when studied in isolation. Paper two reports the results of an experiment that investigates whether decision processing mode (either intuitive or deliberative) and standard precision impact the decision to report aggressively. While I do not find evidence that supports an interaction between standard precision and decision processing mode, I find evidence of two main effects. That is, consistent with prior literature, less precise accounting standards are associated with less aggressive financial reporting

decisions. In addition, I also find evidence that intuitive processing is associated with less aggressive reporting decisions.

Paper three reports the results of an experiment which investigates how the precision of an accounting standard influences auditor judgment. Opponents of the transition to IFRS argue that less precise standards threaten audit quality through their influence on several elements of audit judgment: reduced ability to constrain aggressive reporting, increased susceptibility to management influence and reduced comparability in auditor judgment. I find that less precise standards are associated with greater constraint of aggressive financial reporting. Further, I find no evidence that less precise standards are associated with greater influence by management or a reduction in comparability. These findings are important, as they suggest that the SEC's proposed migration towards a less precise standard system may not necessarily have consequences for audit quality.

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INTRODUCTION

The United States Securities and Exchange Commission (SEC) has formally advocated for the creation of a single set of global accounting standards since the issuance of their convergence roadmap (SEC 2008). As the SEC considers the potential convergence of U.S. Generally Accepted Accounting Principles (GAAP) with International Financial Reporting Standards (IFRS), it has a keen interest in monitoring the implementation of two recently revised accounting standards. The revised standards on revenue recognition and lease accounting are of particular interest, as they were developed by a joint task force of the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB). What makes these revised standards a notable development is that the two standard setting bodies have traditionally differed in the precision of standards issued, with the IASB issuing less precise, principles-based standards while the FASB has historically issued more precise, rules-based standards. As a result, this has renewed interest in how the precision of accounting standard influences the quality of the external financial reporting process. My dissertation consists of three studies that seek to address whether and how accounting standard precision interacts with different behavioral factors to influence aggressive financial reporting decisions and auditor judgment.

Paper one (co-authored with Jay C. Thibodeau and Jacob M. Rose) examines how the incentive horizon of financial statement preparers, along with standard precision, impacts aggressive financial reporting. The extant research on standard precision suggests that financial statement preparers are less likely to report aggressively when applying less precise standards due to concerns about increased scrutiny from auditors and regulators. A second factor which has been shown to relate to aggressive financial reporting is stock-

based compensation. Specifically, restricted forms of stock-based compensation encourage a long-term incentive horizon, which has been associated with a reduction in aggressive financial reporting. However, there is no research investigating how these factors might interact to influence preparers' decisions to report aggressively. We find evidence of a significant interactive effect, specifically that when the incentive horizon is long term, more precise standards are associated with a decrease in aggressive financial reporting. This finding is notable as it shows that the effects of standard precision are moderated by incentives and that the market implications of standard precision cannot be fully understood when such precision is studied in isolation.

Paper two (sole-authored) reports the results of an experiment that investigates whether decision processing mode (either intuitive or deliberative) and standard precision impact the decision to report aggressively. While psychology research has long supported the use of deliberative processing for optimal decision making, recent studies reveal that decision making under deliberative processing may lead to a focus on only the most salient decision factors, potentially resulting in suboptimal decision making. In contrast, intuitive processing relies on a holistic approach that makes use of all available information and has been shown to result in both optimal and more ethical decision making. However, there is no research investigating whether and how these factors might interact to influence aggressive financial reporting. While I do not find evidence that supports an interaction between standard precision and decision processing mode, I find evidence of two main effects. That is, consistent with prior literature, less precise accounting standards are associated with less aggressive financial reporting decisions. In addition, I also find evidence that intuitive processing is associated with less aggressive financial reporting

decisions. This finding is interesting, as accounting tasks often require computation and careful analysis which have been presumed to require the use of deliberative processing. The results suggest that intuitive processing throughout the financial reporting process may be effective at reducing aggressive financial reporting. Future research is needed to explore how to best stimulate intuitive processing during the financial reporting process.

Paper three (sole-authored) reports the results of an experiment which investigates how the precision of an accounting standard influences auditor judgment. In comment letters to the SEC in response to the Global Accounting Standards roadmap (SEC 2010), opponents of the transition to a single set of global accounting standards argue that less precise standards present a threat to audit quality through their influence on several key elements of audit judgment: (1) a reduction in the ability to constrain aggressive reporting, (2) an increase in management's ability to influence the audit process and (3) a reduction in the comparability of auditor judgments across audit firms. This paper investigates whether the precision of an accounting standard influences these elements of staff auditor judgment. I find evidence that less precise standards are associated with greater constraint of aggressive financial reporting. Further, I find no evidence that less precise standards are associated with greater influence by management or a reduction in comparability. Taken together, these findings have important implications for policy makers, as they suggest that the SEC's proposed migration towards a less precise standard system may not necessarily have consequences for audit quality.

PART 1 –
Standard Precision and Aggressive Financial Reporting: The Influence of Incentive Horizon

I. INTRODUCTION

Proponents of rules-based standards suggest that greater standard precision improves comparability between companies by providing bright-line tests and thresholds that reduce the need for judgment in the application of standards (Schipper 2003; Shortridge and Myring 2004; McCarthy and McCarthy 2014). Reductions in the amount of judgment needed to apply standards are expected to decrease opportunities to manage earnings (Wüstemann and Wüstemann 2010). However, existing empirical evidence does not support this point of view. Instead, managers tend to structure transactions in a way that requires the use of accounting treatments that are consistent with their personal incentives rather than the true economic substance of the transaction (Imhoff and Thomas 1998). In addition, financial statement preparers are inclined to report more aggressively under more precise standards relative to less precise standards (Agoglia, Doupnik & Tsakumis 2011). Importantly, prior research that has provided evidence in support of more aggressive financial reporting under more precise standards involved the decisions of financial statement preparers who faced short-term incentives only. The purpose of this study is to investigate whether the incentive horizon (i.e., whether incentives emphasize short-term or long-term firm goals) will influence the effects of standard precision on aggressive financial reporting.

The choice of whether employee incentive structure encourages short-term profitability or long-term growth is an important decision for top management. Indeed, for compensation to properly motivate employees to work towards achieving firm strategic

objectives, the incentive structure should align with the strategic focus of top management (Schuler and MacMillan 1984; Balkin and Gomez-Mejia 1990). For example, short-term oriented incentives (such as unrestricted stock or stock options) may incentivize employees to prioritize short-term profitability, potentially at the expense of long-term growth (Dechow and Sloan 1991; Narayanan 1996; Antia, Pantzalis & Park 2010) and may even encourage aggressive financial reporting. In contrast, restricted forms of compensation (e.g. stock grants and options with vesting requirements) may extend the incentive horizon of management, which could result in less myopic behavior (Chava and Purnanandam 2010; Bebchuk and Fried 2010), and may even discourage aggressive financial reporting (Johnson, Ryan & Tian 2009). In effect, the selection of incentive structure may be viewed as an important signal of the preferences and objectives of top management. And, since chief financial officers often choose to engage in aggressive financial reporting due to pressure from top management (Feng et al. 2011), we expect that any signal of top management's preferences may influence a financial statement preparer's decision to engage in aggressive financial reporting.

In this study, we examine the effect of incentive horizon and standard precision on financial statement preparers' decision to report aggressively. Specifically, we extend the Agoglia, Doupnik and Tsakumis (2011) study by investigating the effect of incentive horizon on a financial statement preparer's decisions to report aggressively. We expect that when incentive horizon is short-term, financial statement preparers applying less precise standards will be less likely to make an aggressive financial reporting decision relative to those applying more precise standards. When the incentive horizon is long-term, which may be considered a signal that top management prefers long-term growth, we expect that

financial statement preparers would choose to report more conservatively. Moreover, given the transparency and relative lack of professional judgment required to apply a rules-based standard, we expect that financial statement preparers applying more precise accounting standards will report less aggressively relative to those applying a less precise accounting standard.

To accomplish our objectives, we conduct a 2 x 2 between-participant experiment with 147 experienced financial statement preparers, over half of whom are Chief Financial Officers. Participants complete a lease classification case where we manipulate standard precision (more precise or less precise) and the time horizon of incentives (short-term or long-term). We find a significant interaction between standard precision and time horizon of incentives on a financial statement preparer's decision to report aggressively. More specifically, our results show that when the time horizon of incentives focuses financial statement preparers on long-term goals, a more precise, rules-based standard regime results in less aggressive financial reporting decisions.

This study makes several contributions. Prior research on standard precision suggests that less precise standards (i.e., principles-based) better constrain aggressive financial reporting by preparers as compared to more precise standards (i.e., rules-based). Our findings reveal an important interactive effect when considering the time horizon of top management's incentive structure. Specifically, when the incentive structure emphasizes short-term performance, consistent with prior literature, we find that less precise standards are associated with less aggressive financial reporting by preparers. However, when the incentive structure emphasizes long-term performance, we find that more precise standards are associated with more aggressive financial reporting by

preparers. This result has important implications. Namely, it suggests that the effects of standard precision on aggressive financial reporting cannot be fully understood without first considering the time horizon of the preparer's incentive structure. Relatedly, our findings also suggest that further migration of financial reporting standards towards a less precise regime may not be as effective as previously thought at reducing aggressive financial reporting. This finding is particularly important as U.S. policy makers contemplate the migration of even more U.S. GAAP standards towards convergence with less precise International Financial Reporting Standards (IFRS).

The remainder of this study is organized as follows. Section II provides background information and develops our hypotheses. Sections III describes the experiment used to test our hypotheses. Section IV provides our experimental results, and Section V discusses our conclusions, implications, and limitations of our research, and suggestions for future research.

II. BACKGROUND AND HYPOTHESIS DEVELOPMENT

Standard Precision

In May 2014, a joint task force of the FASB and IASB released an updated standard on revenue recognition which aims to address the fundamental differences between revenue recognition standards originally promulgated as U.S. GAAP or IFRS.[1] The newly issued standard replaces the transaction- and industry-specific guidelines of the previous revenue recognition U.S. GAAP standard with a more principles-based approach. In

[1] In August, 2015, the FASB issued Accounting Standards Update (ASU) No. 2015-14, *Revenue From Contracts With Customers (Topic 606): Deferral of the Effective Date*, which delayed the effective date of the standard by one year.

general, U.S. GAAP is primarily comprised of rules-based standards, which provide more precise guidance for preparers. In contrast, IFRS is primarily comprised of principles-based standards, which provide less precise guidance for preparers and are designed to allow a greater degree of judgment in determining the accounting treatment which best represents the underlying economic reality of the transaction.

Advocates for rules-based standards maintain that the precise guidance offered by rules-based standards provides a common knowledge base and set of assumptions on which to base reporting decisions (Schipper 2003; Shortridge and Myring 2004; McCarthy and McCarthy 2014). The precise criteria of rules-based standards are intended to remove judgment from the classification process and improve comparability between firms (Shortridge and Myring 2004). Further, it is generally believed that adherence to rules-based standards helps to shield financial statement preparers from criticism for aggressive financial reporting decisions (Benston, Bromwich & Wagenhofer 2006). Yet, it is also possible that the bright-line rules and thresholds which characterize rules-based standards may encourage opportunistic transaction structuring designed to circumvent the true spirit of the standard.[2] Further, dissimilar transactions which may be forced into the same accounting treatment may, in fact, threaten comparability across organizations (McCarthy and McCarthy 2014).

Advocates for principles-based standards believe that less precise standards allow recorded transactions to reflect their true economic substance, which ultimately leads to

[2] For example, Imhoff and Thomas (1988) document a significant decline in capital leases and corresponding increase in operating leases by companies that were previously capital-lease intensive following the release of Financial Accounting Standards Board (FASB)'s Statement of Financial Accounting Standard (SFAS) No. 13 *Accounting for Leases*. This standard required capital leases to be treated as assets and debt, which moved the disclosure of such from the footnotes to the balance sheet.

greater understandability of financial statements (Shortridge and Myring 2004; McCarthy and McCarthy 2014). However, a perceived weakness of principles-based standards is that financial statement preparers may not apply such standards consistently, as there is a greater degree of interpretation and judgment involved in determining the appropriate accounting treatment (McCarthy and McCarthy 2014). Additionally, incentives may be present that influence the behavior of financial statement preparers (Nelson 2003; Wüstemann & Wüstemann 2010) because the opportunity to select preferential accounting treatments may be greater under principles-based standards (McCarthy and McCarthy 2014).

In that spirit, several studies on accounting standard precision examine factors which affect reporting decisions made by financial statement preparers. Agoglia, Doupnik and Tsakumis (2011) use a case in which participants are asked to determine the appropriate classification of a lease. They find that participants applying a principles-based standard are significantly less likely to report aggressively than those applying a rules-based standard.

Peytcheva (2017) uses a task that has frequently been employed in the psychology literature to examine the role of standard precision and ambiguity of evidence. The task, developed by Jastrow (1899; 1900), asks participants to classify the subject of a photograph as either a duck or a rabbit, and offers economic incentives which favor classifying the animal as a rabbit. The study operationalizes the standard precision construct by providing either rules-based or principles-based guidelines for classification. The study also manipulates the frame and magnification of the photograph to operationalize the ambiguity of evidence. The study finds that there is no difference between participants classifying the

photograph consistent with their economic incentives (i.e. as a rabbit) under principles-based standards and rules-based standards when the evidence is relatively clear. However, when evidence is more ambiguous, principles-based standards are associated with fewer participants classifying the photograph consistent with their incentives.

Psaros and Trotman (2004) examine the effect of incentives on a manager's decision to report aggressively. They use a case in which participants are asked to determine whether or not consolidation of financial statements are necessary, and manipulate whether incentives exist that favor not consolidating the financial statements. They find that marginally more participants elect not to consolidate the financial statements when presented with rules-based standards. This suggests that financial statement preparers are more likely to report more aggressively, and report in a manner that is consistent with their own personal incentives, under rules-based standards.

Financial Incentive Structure

The agency problem is a conflict of interest that exists in a relationship when one party is expected to act in another party's best interest (Jensen and Meckling 1976). Within financial accounting, the agency problem often presents as a conflict of interest between company management and the shareholders of the firm. Managerial ownership is viewed as one potential solution to the long-standing agency problem. Specifically, if management has an ownership stake in the company, their interests align much more closely with that of investors in the company (Jensen and Meckling 1976; Morck, Shleifer & Vishny 1988). However, as the proportion of management's wealth which is tied to company performance via stock-based compensation increased considerably in the 1990's, stock-based compensation also shouldered the blame for many high-profile accounting frauds. That is,

stock-based compensation may provide a strong incentive to improve reported financial results, leading some to resort to fraudulent financial reporting (Bebchuck and Fried 2003). This view is supported by studies which find that stock-based compensation is positively associated with management's likelihood to engage in earnings management behavior (Cheng and Warfield 2005; Bergstresser and Philippon 2006).

Cheng and Warfield (2005) investigate the relationship between management equity incentives and earnings management. They find that managers with high equity incentives are more likely to report earnings that just meet or beat analysts' forecasts and are less likely to report negative earnings surprises. They also find that when management has consistently high equity incentives from stock-based compensation, management is less likely to report large positive earnings surprises. Chava and Purnanandam (2010) find that executives choose financial policies based on risk-seeking incentives provided by stock-based compensation. Taken together, these findings suggest that stock-based compensation provides an incentive for management to act in a self-interested manner.

Interestingly, Erickson, Hanlon and Maydew (2006) investigate whether equity incentives differ between fraud firms and a matched pair of firms without detected fraudulent activity, finding that there is no significant association between fraud and equity incentives, nor the sale of stock or exercise of options during the period of the alleged fraud. It is important to note that these three studies examine different constructs: proxies for earnings management (Cheng and Warfield 2005), risk-seeking financial policies (Chava and Purnanandam 2010), and SEC Accounting and Auditing Enforcement Releases containing the keyword "fraud" (Erickson, Hanlon & Maydew 2006). While these

constructs are fundamentally different, each measures an action that is motivated by self-interest rather than the overall best interests of the larger group of remaining shareholders.

The findings that stock-based compensation may, in fact, encourage self-interested behavior may be due to a phenomenon referred to as management short-termism. Marginson and McAuley (2008) define management short-termism as a preference for actions in the near term that have detrimental consequences for the long-term. Specifically, managers may prioritize their own financial interests by focusing on short-term results at the expense of long-term growth and profitability, which may be more optimal for the firm and shareholders (Dechow and Sloan 1991; Narayanan 1996; Antia, Pantzalis & Park 2010).[3] To address the problem of management short-termism, Bebchuck and Fried (2010) propose a series of restrictions on stock-based compensation, such as vesting restrictions and unwinding limitations that, if adopted, would extend the time horizon of management incentives.

Johnson, Ryan & Tian (2009) examine the relationship between the type of equity incentive and the occurrence of corporate fraud. They find that executives of fraud firms have a greater percentage of compensation in the form of unrestricted stockholdings relative to executives at non-fraud firms, and that unrestricted stockholdings are the largest incentive source relative to other forms of compensation. As discussed previously, unrestricted stockholdings may shorten the incentive horizon of management. Gopalan et al. (2014) examine the impact of pay duration, finding that shorter CEO pay duration (based on the vesting schedule of restricted stock grants and options) is associated with greater incentive to manipulate short-term performance, whereas longer CEO pay duration

[3] It should be noted that this concept differs from myopia, which is difficulty assessing long-term consequences (Strotz 1956).

is associated with a lesser extent of income-increasing accruals. These findings may be attributable to the incentive horizon of the CEO, as pay duration represents a financial incentive which impacts the incentive horizon of management.

Taken together, these studies suggest that stock-based compensation without any restrictions on the sale of stock grants or exercise of options may encourage management short-termism by providing a financial incentive based on short-term performance. This behavior may not be consistent with the long-term best interest of the company or its shareholders. However, vesting periods and stock holding requirements can be effective at reducing management short-termism by extending the incentive horizon for management.

Hypothesis Development

We develop our hypothesis based on the conditions of the Agoglia, Doupnik and Tsakumis (2011) study, which finds that principles-based standards are associated with less aggressive financial reporting decisions. Importantly, the Agoglia, Doupnik and Tsakumis (2011) study uses a case context which does not provide any incentive to the financial statement preparer which would lengthen their incentive horizon beyond considering the short-term effects of the decision at hand. Therefore, we expect to replicate their findings in our experimental condition which is focused on a short-term incentive horizon (i.e. without a holding requirement for stock-based compensation). We expect that in this condition, financial statement preparers are less likely to make an aggressive financial reporting decision when provided with less precise accounting standards than will financial statement preparers applying a more precise accounting standard.

The choice of incentive structure is an important choice made by the top management of a firm. Firms structure their financial incentives (i.e. select a compensation

mix) in a manner which aligns with the goals and strategy of the firm (Schuler and MacMillan 1984; Chen and Jermais 2014). A firm's choice of financial incentive structure may be viewed as a reflection of top management's preferences and objectives (Balkin and Gomez-Mejia 1990). Specifically, top management's choice of a compensation mix which uses restricted forms of stock-based compensation may be perceived as a signal that top management is emphasizing long-term growth over short-term profitability. Given that chief financial officers often become involved in aggressive reporting due to pressure from the CEO (Feng et al. 2011), it is reasonable to expect that a signal that management is emphasizing long-term profitability may encourage financial statement preparers to report more conservatively. As rules-based standards make the correct or appropriate accounting treatment much more transparent, it is likely easier for financial statement preparers to select the conservative accounting treatment under rules-based standards.

The discussion above leads to the following pair of hypotheses that predict a disordinal interaction of standard precision and incentive horizon:

> **Hypothesis 1a:** When the incentive horizon is short-term, financial statement preparers applying a less precise standard will be <u>less</u> likely to make an aggressive financial reporting decision than will preparers applying a more precise standard.
>
> **Hypothesis 1b:** When the incentive horizon is long-term, financial statement preparers applying a less precise standard will be <u>more</u> likely to make an aggressive financial reporting decision than will preparers applying a more precise standard.

III. RESEARCH METHOD

Participants and Design

Participants in the study are 147 experienced financial statement preparers (80 chief financial or accounting officers, 18 controllers, 18 heads of finance,[4] and 31 individuals in other managerial finance or accounting positions[5] from both the United States and Bangladesh). The participants had an average of 17.7 years of professional work experience, which was important given that our experiment requires the participants to make a decision that would typically be made by experienced financial statement preparers. To test our hypotheses, we conduct an experiment that asks participants to assume the role of the financial statement preparer for a fictitious company in order to make a lease classification decision, partially replicating the Agoglia, Doupnik and Tsakumis (2011) study. Within the experiment, we manipulate our constructs of interest: *INCENTIVE_HORIZON* and *STANDARD_PRECISION.*[6]

Our first independent variable, *INCENTIVE_HORIZON* is manipulated at two levels: short-term and long-term. Participants in the short-term condition are told that a significant portion of management's compensation is paid in stock which can be sold at any time. In the long-term condition, participants are told that a significant portion of

[4] The survey asked the participants current position in an open ended format. Thirty-five responses were coded as heads of finance, which included the following: Director of Finance, Head of Accounting, Head of Finance, VP of Finance or Accounting, Senior VP of Finance or Accounting, Executive VP of Finance or Accounting.

[5] The survey asked the participants current position in an open ended format. Twenty-one responses were coded as heads of finance, which included the following: Accounting Manager, Finance Manager, Senior Accountant, and Assistant Manager of Finance or Accounting.

[6] We also manipulated the future self-continuity of the financial statement preparer using a prime developed by Hershfield et al. (2012) as a second method of lengthening incentive horizon. We anticipated a potential interactive effect of future-self continuity and standard precision on a financial statement preparer's decision to report aggressively. Preliminary analyses revealed there is no significant interactive effect.

management's compensation is paid in stock which cannot be sold for five years or more. The independent variable *INCENTIVE_HORIZON* is an indicator variable where zero represents the short-term treatment condition, and one represents the long-term treatment condition.

The variable *STANDARD_PRECISION* is manipulated at two levels: more precise and less precise accounting standard. Participants in the more precise standard condition are provided with rules-based lease capitalization criteria from ASC 840 *Leases* (i.e. lease must be classified as a capital lease if the lease term is equal to 75% or more of the expected economic useful life of the asset). Participants in the less precise standard condition are provided with principles-based lease capitalization criteria from IAS 17 – *Accounting for Lease* (i.e. lease must be classified as a capital lease if the lease term is for the major part of the expected economic useful life of the asset).[7] The independent variable *STANDARD_PRECISION* is an indicator variable where zero represents the more precise treatment condition, and one represents the less precise treatment condition.

Procedures

Participants were provided with the research instrument in the Appendix. The first page of the instrument collects demographic information about our participants.[8] Next,

[7] It should be noted that a joint task force of the FASB and IASB recently issued revised standards for accounting for leases (FASB issued February 25, 2016 and IASB issued January 13, 2016). The new standards require all leases which do not meet the requirement of short-term leases (lease term less than 12-months) be recognized on the balance sheet of the lessee. While the revised standards do substantially change the lease classification criteria, we do not believe this impacts the generalizability of our study as we are primarily interested in the effect of standard precision rather than the application of a particular accounting standard.

[8] The first page also contained the manipulation of a third independent variable, future self-continuity. Future self-continuity is the extent to which an individual feels connected to the person they will become in the future (Parfit 1971). It has been shown that a high level of future self-continuity is associated with more ethical decision making (Hershfield et al. 2012). We did not detect a statistically significant association between future self-continuity and our dependent variable.

participants are asked to assume the role of controller for a fictitious company. The participant is provided background information about the company's financial health, indicating that the company is just shy of reaching their consensus analyst forecasted earnings for the year. All participants are told that company executives' bonuses and a significant portion of their salaries are paid in stock. Each participant is then provided with either the short-term or long-term *INCENTIVE_HORIZON* manipulation.

The instrument then provides information about a lease classification issue which the financial statement preparer is facing. Participants are provided with lease classification criteria, receiving either the rules-based or the principles-based *STANDARD_PRECISION* manipulation. Each participant is then told that for the decision at hand, they are to assume the only relevant criterion is the ratio of the lease term to the expected economic useful life of the leased asset. Participants are provided with the following definitions, which are consistent with both ASC 840 and IAS 17:

- *"Lease term" is defined as the fixed non-cancelable term of the lease plus all periods covered by bargain renewal options.*
- *"Bargain renewal options" allow the lessee to renew the lease for a rental sufficiently lower than the fair rental of the property such that exercise of the option appears, at the inception of the lease, to be reasonably assured.*

The case facts state that the lease has a non-cancelable lease term of seven years, with the option to renew the lease for an additional year. The participant must first judge whether the rate for the additional year represents a bargain renewal option to determine if the

additional year should be included in the lease term, and then judge whether the lease terms meets the criteria for capitalization provided by the lease standard.

Participants are provided a summary of the financial impact of each of the two accounting treatments. The summary demonstrates that the capitalization of the lease provides less favorable financial results, whereas classifying the lease as an operating lease will increase projected earnings to meet the consensus analyst forecast. Thus, management has an incentive to record the lease as an operating lease.

Participants are then asked to assess the likelihood that they would classify this lease as an operating lease or a capital lease on a 1-10 Likert-type scale where 1 represents "Definitely classify as an operating lease" and 10 represents "Definitely classify as a capital lease." The participant's lease classification decision is the dependent variable (*LEASE_CLASSIFICATION)*. After responding to the dependent measure, participants responded to attention check and debriefing questions.[9]

IV. RESULTS

Hypotheses Tests

Our hypotheses examine two effects that are indicative of a disordinal interaction between the precision of accounting standard and the incentive horizon of financial statement preparers. The first hypothesis posits that when the incentive horizon is short-

[9] The instrument also contained information about the Research & Development budget of the firm. This portion of the instrument was designed to see the switch between real and accruals-based earnings management under our experimental conditions. See Cohen, Dey and Lys (2008) for a discussion on the use of real and accrual-based earnings management. The participant was told that he or she could achieve targeted earnings through decreasing the R&D budget for the remainder of the fiscal year. However, each $100,000 decrease in the R&D budget results in a 1% chance of losing ground to a competitor. Participants were then asked how much they would like to cut from the R&D budget with a maximum decrease of $4 million. The decrease amount represented our real earnings management dependent variable. Our preliminary analysis shows statistically insignificant results for the real-earnings management dependent variable.

term, financial statement preparers applying a less precise standard will be less likely to make an aggressive financial reporting decision than will preparers applying a more precise standard. The second hypothesis proposes that when the incentive horizon is long-term, financial statement preparers applying a less precise standard will be more likely to make an aggressive financial reporting decision than will preparers applying a more precise standard The hypotheses are tested using a 2 X 2 ANOVA, and results are reported in Table 1.1 Panel B. The dependent variable is the lease classification decision, where participants indicate their decision on a ten-point (1 = definitely classify as an operating lease and 10 = definitely classify as a capital lease). The independent variables are *STANDARD_PRECISION* and *INCENTIVE_HORIZON*. Consistent with our expectations, there is a statistically significant interaction between *STANDARD_PRECISION* and *INCENTIVE_HORIZON* (p = .019).

[INSERT FIGURE 1.1 ABOUT HERE]

To test the specific hypotheses, we employ a linear contrast of cell means. We use a contrast weight of +1 for the short-term incentive horizon and less precise treatment condition, -1 for the short-term incentive horizon and more precise standard treatment condition, -1 for the long-term incentive horizon and less precise standard treatment condition, and +1 for the long-term incentive horizon and more precise standard treatment condition. The means reported in Table 1.1 Panel A are consistent with our hypothesis, and the planned contrast reported in Panel C supports the hypothesized interaction (F = 5.68, p = 0.018). As suggested by Guggenmos, Piercey and Agoglia (2017) we also examine the residual between-cells variance, which is insignificant (p = 0.808), indicating that the contrast is a good fit for the data. Thus, H1a and H1b are supported.

[INSERT TABLE 1.1 ABOUT HERE]

It is important to explore whether these findings are a function of the standard precision manipulation creating different perceptions of the lease criteria. Specifically, for participants in the less precise standard precision condition, the term "for the major part of" is open to their own interpretation, which can influence their lease classification.[10] To examine whether the more and less precise lease classification standards created different perceptions of the meaning of "for the major part," we asked participants the following question:

> *If a criterion for classifying a lease as a capital lease is if the lease term is for the major part of the economic life of the asset, what is the minimum percentage you would assign to the expression "for the major part of" (Please answer on a scale of 0% to 100%).* _____ *%*

Participants in the less precise condition perceived that "for the major part of" represented a lower percentage (mean = 61.18, p = 0.018) relative to participants in the precise treatment condition (mean = 68.83).[11] Therefore, we include this perception as a covariate and repeat the analyses above to test hypotheses 1a and 1b. The results are unchanged by including this covariate.

As an additional test, we follow Agoglia, Doupnik and Tsakumis (2011) and repeat our analyses using only the participants who indicated that their perception of "for the major part of" fell within the range of 70 percent to 80 percent. Thus, this test directly compares

[10] If a participant in the less precise condition interprets the phrase "for the major part of" to be 69%, the resulting classification of the lease is as a capital lease. In contrast, if the participant interprets "for the major part of" to mean 80%, it would result in an operating lease. Therefore, we limit our analysis to include only participants in the less precise condition whose responses were within the professional judgment range of 70 – 80%.

[11] Including this perception as a covariate does not change the results of hypotheses tests.

participants who had similar perceptions of the lease criterion during the experiment. Of the 71 participants in the less precise standard treatment, 26 responded within the 70-80 percent range. We retest our hypotheses using only these participants, and the results are shown in Table 1.2. We find results consistent with our initial hypotheses testing, with a significant interactive effect of *STANDARD_PRECISION* and *INCENTIVE_HORIZON* ($F = 2.86$, $p < .05$). The planned contrast tests are also consistent. These results provide further support for our findings for H1a and H1b.

Debriefing Analyses

The debriefing questions examine potential sources of influence on participants' lease classification decisions (see Table 1.3). Agoglia, Doupnik and Tsakumis (2011) find evidence that concerns about second-guessing by regulators and concerns about the economic substance of events mediate the relationship between standard precision and decisions to engage in aggressive financial reporting. We measure perceptions of concern for regulator second-guessing and economic substance in the debriefing questions and examine whether these act as mediating variables in our study. An additional debriefing item measures perceptions of the influence of negative consequences from the CEO.

Unlike Agoglia, Doupnik and Tsakumis (2011), we find no evidence that concerns about economic substance or regulator second-guessing are mediating variables. Further, by splitting the file into short-term and long-term incentive conditions, we examine whether the economic substance of the lease or concern for second-guessing by regulators are mediating variables in the short-term condition that is similar to the decision context in Agoglia, Doupnik and Tsakumis (2011). Again, there is no evidence of mediation. To further examine what is driving decisions, we examine whether concerns about CEO

reprisals mediate the relationship between standard precision and decisions to report aggressively. Again, there is no evidence of mediation for either the entire sample or split samples for two incentive horizons.

There is no evidence of statistically significant differences between conditions for the debriefing item which measures perceptions of the influence of negative consequences from the CEO. This is important to note, as our theory posits that financial statement preparers perceive the company's selection of incentive type as a signal of the top executive's (i.e. the CEO) preference for short-term profitability or long-term growth.

Additional Tests

Given that our sample is comprised of financial statement preparers from both the United States (61) and Bangladesh (86), we examine whether there is a country effect on the results. Participants from the United States have frequent exposure to precise, rules-based standards, which are prevalent in US GAAP. In contrast, Bangladesh follows the Bangladesh Financial Reporting Standards, which are closely modeled after International Accounting Standards and IFRS. The Bangladesh standards are more principles-based in nature, and tend to be less precise than US GAAP. It is possible that our results may be influenced by preparers' familiarity with different standard types. To explore the potential for familiarity with different standards to influence our findings, we create an indicator variable for the country of origin of our participants (0 = US participant, 1= Bangladesh participant) and include this covariate in the model used to test our hypotheses. The country indicator variable is not statistically significant ($F = .906$, $p = 0.343$), and results of hypotheses tests are unchanged. Our results are robust for financial preparers who are familiar with either more or less precise standards.

V. SUMMARY AND CONCLUSIONS

The FASB has recently issued two new accounting standards, which were developed by joint task forces of the FASB and IASB, and are more principles-based in nature. As a result, empirical evidence supporting how the precision of accounting standards influences decisions made by financial statement preparers is of great importance in today's accounting environment. Prior literature supports the movement towards a more principles-based approach to standard setting, as it finds that less precise standards are more effective at reducing aggressive financial reporting relative to more precise, rules-based standards. Our study examines whether these findings hold in other decision contexts. Specifically, we examine how standard precision and the incentive horizon of financial statement preparers jointly impact the decision to report aggressively.

Consistent with our expectations, we find a significant interactive effect of standard precision and incentive horizon. In the short-term incentive horizon condition, we find evidence of a statistically significant difference in aggressive financial reporting based on standard precision. Specifically, we find that less precise standards are associated with a reduction in aggressive financial reporting. However, we find that when the incentive horizon is long-term, financial statement preparers applying less precise standards are more likely to report aggressively than those applying more precise standards. This finding suggests that the effects of standard precision are moderated by incentives, and that the market implications of standard precision cannot be fully understood when standard precision is examined in isolation.

Our findings have important implications for both practice and research. Our results provide important insights which policy-makers may find of interest as they consider

migrating additional accounting standards towards a more principles-based system. Our findings suggest that such migration may not necessarily result in a reduction in aggressive financial reporting, as prior studies have found. Further, in our setting, we find that a rules-based approach appears to better constrain aggressive financial reporting when the structure of financial incentives emphasizes long-term results. While this finding is specific to our long-term incentive horizon context, given the prevalence of the use of restricted forms of stock-based compensation in today's business environment, this finding may warrant further investigation.

Future research could extend our line of inquiry by examining standard precision in alternate settings to identify other factors which moderate the relationship between standard precision and aggressive financial reporting. It is important to note that our case focuses on a specific context (lease classification), which has been revised by the joint task force of the FASB and IASB. To broaden the generalizability of our findings, future research could examine standard precision using alternative standards. Such research would enhance our understanding of the role that standard precision plays in influencing financial statement preparers' decisions to report aggressively.

PART 2

The Influence of Standard Precision and Decision Processing Mode on Aggressive Financial Reporting

I. INTRODUCTION

In recent years, joint task forces comprised of members of both the Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB) have released updated standards on revenue recognition and lease accounting, which aim to address the fundamental differences in the accounting standards of U.S. Generally Accepted Accounting Principles (U.S. GAAP) and International Financial Reporting Standards (IFRS). The revised standards are an important consideration of the U.S. Securities and Exchange Commission (SEC) in their Global Accounting Standards work plan, which addresses potential IFRS adoption within the United States (SEC 2010). The product of the joint task forces is of particular interest given that U.S. GAAP has traditionally differed from IFRS in the precision of accounting standards issued. While U.S. GAAP is comprised of primarily rules-based accounting standards, which are more precise in nature and provide bright-line tests and thresholds, IFRS is primarily comprised of principles-based standards, which are less precise in nature.

Opponents of the transition to a standard system which is less precise in nature maintain that more precise standards help to encourage comparability between companies through the use of thresholds and tests that reduce the need to exercise judgment in the decision process (Schipper 2003; Shortridge and Myring 2004). A reduction in the role of judgment in the financial reporting process is expected to reduce the opportunity of financial statement preparers to manage earnings (Wüstemann and Wüstemann 2010). Scholarly research on standard precision generally does not support this perspective. Prior

research finds that more precise standards may encourage financial statement preparers to structure transactions to achieve an incentive-consistent accounting treatment (Imhoff and Thomas 1998) and that more precise standards are associated with more aggressive financial reporting decisions by financial statement preparers (Agoglia, Doupnik & Tsakumis 2011). I propose that standard precision may not operate in isolation, and that the manner in which a financial statement preparer processes their decision (either intuitively or deliberatively) may moderate the relationship between standard precision and aggressive financial reporting.

Psychology literature has long supported the notion that an individual can process decisions in one of two main ways: intuitively or deliberatively (Kahneman 2011; Kahneman and Frederick 2002; Chaiken and Maheswaran 1994; Simon 1987). Intuitive processing (often referred to as System 1 processing) is quick, emotive, and requires little conscious effort to reach a conclusion. In contrast, deliberative processing (System 2) is slower, analytical and requires intentional and effortful processing. Notably, deliberative processing is capable of gathering information and applying rules-based analysis to determine a decision outcome, which is a limitation of intuitive processing (Reynolds 2006). For this reason, it is generally presumed that accountants rely on deliberative processing in the financial reporting process. Within the psychology literature, intuitive processing is generally regarded as suboptimal to deliberative processing. Recently literature has emerged which shows that the holistic approach utilized in intuitive processing may yield more optimal (Zhong 2011; Kahneman and Klein 2009) and more ethical (Reynolds 2006) decision making relative to deliberative processing.

This study examines the joint effect of accounting standard precision and decision processing mode on aggressive reporting decisions. To examine this issue, I conduct a 2 X 2 between-subjects experiment with participants from Amazon Mechanical Turk. The case was applied as an automobile insurance decision (modified from the Agoglia, Doupnik & Tsakumis 2011 lease classification decision) to make it more accessible to non-accounting participants. I do not find evidence to support an interactive effect of standard precision and decision processing mode on the level of aggressive financial reporting. However, the results do support two significant main effects.

The results reveal a significant main effect of standard precision on the decision to report aggressively. Consistent with prior literature, I find that less precise accounting standards are associated with less aggressive reporting decisions. Notably, I find no evidence that reporting decisions vary to a greater extent when applying less precise standards. I also find evidence of a significant relationship between decision processing mode and aggressive financial reporting. I find that intuitive processing is associated with less aggressive reporting decisions relative to deliberative processing. This supports the emerging trend which suggests that utilizing intuitive processing may result in optimal decision making.

The study has important implications for both practitioners and regulators, as well as academics. First, the findings pertaining to standard precision may provide important insights which policy-makers may find of interest as they consider migrating additional accounting standards towards a more principles-based system such as IFRS. The results suggest that such a migration may be effective at reducing aggressive financial reporting decisions by financial statement preparers. Also, I address a common concern about the

transition to less precise standards; that less precise standards will increase variability in reporting decisions, threatening comparability. I find no evidence to support this concern.

Secondly, it is commonly assumed that accounting professionals do and should rely more heavily on deliberative processing than intuitive, given that a limitation of intuitive processing is its inability to evaluate information relative to complex rules, which are ever present in the accounting environment. Further, the math-like nature of most accounting issues encourages an analytical approach (Griffith, Hammersley & Kadous 2014), which requires deliberative processing. I find that intuitive processing is associated with a reduction in aggressive reporting decisions. This speaks to the important role that intuitive judgment can play in the accounting process, as well as the importance of considering how to activate both processing modes throughout the accounting process to encourage less aggressive financial reporting.

Lastly, this study contributes to an emerging stream of literature in both psychology and accounting that refutes the common assumption that deliberative processing is associated with optimal decision processing. Rather, I provide evidence which shows that intuitive processing can yield more optimal decision making than deliberative processing in certain contexts. This is important, as it provides further insight into how decision processing can impact the decision outcome.

The remainder of the paper is organized as follows. Background and hypothesis development are presented in Section II. Section III describes the research design. Results are reported in Section IV, and Section V presents conclusions, limitations, and suggestions for future research.

II. BACKGROUND AND HYPOTHESIS DEVELOPMENT

Standard Precision

In recent years, joint task forces comprised of members of both the FASB and IASB have released updated standards on revenue recognition and lease accounting, which aim to address the fundamental differences in the accounting standards of U.S. GAAP and IFRS. The byproducts of these task forces are newly issued standards which replace the transaction- and industry-specific guidelines that characterize rules-based standards with broader, more principles-based guidance. In effect, the newly issued standards replace a more precise, rules-based standard, common in U.S. GAAP, with a less precise, more principles-based standard, similar to those of IFRS. As members of the accounting community begin to process the changes brought about by the new standards,[12] there is a renewed interest in standard precision and its implications for judgment and decision making.

The debate on standard precision draws arguments from both sides. Advocates for more precise standards maintain that the guidelines and thresholds provide detailed guidance for financial statement preparers (Schipper 2003; Shortridge and Myring 2004). However, opponents argue that more precise standards may encourage self-interested financial statement preparers to structure transactions to meet the criteria for a preferential accounting treatment. One example of opportunistic transaction structuring took place following the release of Financial Accounting Standards Board (FASB)'s Statement of Financial Accounting Standard (SFAS) No. 13 *Accounting for Leases,* which required capital leases to be treated as assets and debt, which moved the disclosure of such from the

[12] While the revenue recognition and lease accounting standards were issued in 2014 and 2016, respectively, the effective dates of the standards are deferred until 2017 and 2019.

footnotes to the balance sheet. Following the issuance of SFAS No. 13, there was a significant decline in capital leases and a corresponding increase in operating leases by companies that were previously capital-lease intensive (Imhoff and Thomas 1988).

Less precise standards provide financial statement preparers with the latitude to select an accounting treatment which best represents the underlying economic reality of the transaction. However, in order for these standards to be used effectively, financial statement preparers must possess the desire to report unbiased results (Maines et al. 2003), and have advanced knowledge sufficient to appropriately apply judgment. Former SEC Chief Accountant Robert Herdman echoed this concern, noting that the application of less precise standards "requires greater discipline by the corporate community, the accounting profession, private sector standard-setting bodies, and, indeed, the SEC staff" in order to maintain consistency (SEC 2002) Moreover, opponents of less precise standards suggest that auditors and regulators may have less power to challenge aggressive financial positions taken by companies due to the degree of judgment involved in applying less precise standards (Wüstemann and Wüstemann 2010; Backof, Bamber & Carpenter 2016).

Several studies have examined the effect of standard precision on the decision to report aggressively. Psaros and Trotman (2004) use a case where financial incentives exist for the financial statement preparer to elect not to consolidate the financial statements of their firm with a newly acquired firm, who had experienced a loss during the year. They find that marginally more participants elect not to consolidate firm financials when presented with more precise standards. This finding suggests that financial statement preparers will report more aggressively when applying more precise accounting standards. Additional support for this relationship is provided by Jamal and Tan (2010), which finds

that less precise standards are associated with less aggressive financial reporting when the auditor has a principles-oriented mindset. Further, Agoglia, Doupnik and Tsakumis (2011) use a lease classification task to examine whether financial statement preparers choose to record a lease as an operating lease (an aggressive classification) or capital lease when there exists an economic incentive to classify the lease as an operating lease. They find that participants applying a less precise standard are significantly less likely to report aggressively than those applying a more precise standard. Mediation analysis reveals that the relationship between standard precision and aggressive financial reporting is attributable to an increase in concern for second-guessing by regulators when preparers are applying less precise standards.[13]

Based on the findings above, I expect to find that less precise standards are associated with less aggressive reporting decisions relative to more precise standards. Accordingly, I hypothesize:

> **Hypothesis 1:** Less precise standards (more precise standards) will be associated with less aggressive (more aggressive) reporting decisions.

Decision Processing Mode

Psychology research has long supported an individual's ability to sort information and make decisions using different modes of decision processing (Kahneman 2011; Kahneman and Frederick 2002; Chaiken and Maheswaran 1994; Simon 1987), namely intuitive or deliberative processing modes.[14] Intuitive processing is a quick and emotive

[13] Agoglia, Doupnik and Tsakumis (2011) find that an increase in concern for second guessing by regulators influences the desire to report in a manner consistent with the economic substance of the transaction, and results in less aggressive financial reporting

[14] Kahneman and Frederick (2002) refer to these modes as System 1 (intuitive) and System 2 (deliberative) processing.

process where decisions are reached through subconscious holistic processing (Wolfe, Christensen & Vandervale 2016; Dane and Pratt 2007, 2009; Lieberman 2000; Simon 1987). At a neurological level, intuitive processing relies on pattern-matching between available information and stored heuristics or prototypes (Reynolds 2006). In contrast, deliberative processing is slower, more effortful, and rational where a careful analysis is performed to reach a decision (Kahneman 2011). Deliberative processing is capable of gathering information and applying rules-based analysis to determine a decision outcome (Reynolds 2006).

Certain individuals may exhibit a strong preference for either deliberative or intuitive processing, whereas others take a more balanced approach relying on the mode which is best suited for the decision context (Pacini and Epstein 1999). The evidence suggests that certain contexts can encourage the use of either intuitive or deliberative processing. For example, intense time pressure is associated with increased reliance on intuitive processing (Kahneman and Klein 2009). In contrast, the need to process complicated decision rules or integrate complex information stimulates the use of deliberative processing (Reynolds 2006). This leads to the common assumption that accounting professionals, who are required to adhere to strict rules and regulations to reach financial reporting decisions, rely extensively on deliberative processing. While certain contexts may encourage the use of one decision processing mode over the other, which processing mode an individual is relying on for a particular decision can only be determined through brain imaging, as each processing mode activates different regions of the brain (Reynolds 2006).

The extant literature tends to regard intuitive processing as suboptimal, finding that decisions made relying on intuitive processing may ignore important informational elements relative to those made using deliberative processing (Lieberman 2000; Tversky and Kahneman 1974). This view is supported by research on ethical decision making. Within this literature stream, there is a common assumption that deliberative processing leads to more ethical (and thus, optimal) results (Etzioni 1988). This assumption relies on various theories of decision making, such as expected utility theory or rational decision making, all of which rely on a calculated and analytical, and thus deliberative, approach to reaching the optimal decision. However, a growing body of literature provides evidence which suggests that the effect of processing mode may not be uniform.

Reynolds (2006) takes a neurocognitive approach to examine ethical decision-making, finding that the most ethical decisions are made when intuitive processing is involved.[15] Further, several studies suggest that (given an appropriate context) intuitive processing may yield decisions that are optimal to those reached through deliberative processing (Zhong 2011; Kahneman and Klein 2009; Khatri and Ng, 2000; Blattberg and Hoch 1990). These studies rely on the notion that intuitive processing involves the use of a multi-faceted approach that aims to incorporate all available information into the decision process. In contrast, when relying on deliberative processing, individuals may only focus on the most salient pieces of information, regardless of the relevance (Zhong 2011; Wilson and Schooler 1991).

The present study employs a modified version of the Agoglia, Doupnik and Tsakumis (2011) lease classification case. Consistent with prior literature (Zhong 2011;

[15] Reynolds (2006) does not explicitly refer to intuitive or deliberative processing, rather referring to the neurological functions of the X-system (intuitive) and the C-system (deliberative).

Wilson and Schooler 1991), I expect that individuals relying on deliberative processing will attenuate to the most salient fact, namely the ratio of the lease term to the economic useful life of the asset. As a result, their decision process may not reflect other pieces of important information that are embedded in the case (e.g. the existence of a bargain renewal option). In contrast, participants relying on intuitive processing are likely to take a holistic approach to classifying the lease, incorporating all available case information, and that this process will lead to more ethical decision making (Reynolds 2006). Accordingly, I hypothesize that participants relying on intuitive processing will make more ethical, and thus more conservative, decisions.

> **Hypothesis 2:** Intuitive processing (deliberative processing) will be associated with less aggressive (more aggressive) decision making.

Process Accountability

Accountability occurs when an individual's performance on a task or decision is being evaluated or monitored, and when there are potential penalties or rewards associated with the outcome (Siegel-Jacobs and Yates 1996). When and how accountability influences a decision is of great importance. Tetlock (1983) posits that the influence of accountability is significantly impacted by the ambiguity of the associated task. Specifically, if the decision maker knows the response that an evaluator will find acceptable, the decision maker is likely to conform to that outcome. However, when the perspective of the evaluator is unknown to the decision maker (i.e. due to ambiguity in the guidance which makes multiple outcomes a possibility), the decision maker is likely to dedicate significantly more effort to the task. Tetlock finds that the increased effort spent in the decision process is

associated with higher levels of judgment accuracy, judgment consistency, the complexity of thinking and amount of information processed.

Siegel-Jacobs and Yates (1996) extend Tetlock's research, by separating accountability into two types: process accountability and outcome accountability. An outcome accountable individual believes that they will be held responsible for the quality of the outcome produced. In contrast, a process accountable individual perceives that they will be evaluated on the sufficiency of their decision-making process. Reflecting these accountability types back to Tetlock's discussion of task ambiguity, it is important to note that Tetlock's first condition, where the decision maker knows the response that an evaluator would find acceptable and conforms to that response, is an example of outcome accountability. The second condition, where the perspective of the evaluator is unknown and the decision maker responds by strengthening their process is an example of process accountability. Consistent with the findings of Tetlock, they find that process accountable individuals performed significantly better than non-accountable individuals in a decision task. More specifically, individuals who were told that they would be evaluated based on their decision process more accurately assessed the likelihood of an event occurring than did those in either the no accountability or outcome accountability conditions.

In the accounting literature, several studies have examined the role of accountability along with standard precision. Agoglia, Doupnik and Tsakumis (2011) examine the relationship between standard precision and aggressive financial reporting, finding that less precise standards are associated with less aggressive reporting. Through path analysis, they find that the observed relationship is influenced by increased concern for second-guessing by regulators. Financial statement preparers' concerns for second-

guessing by regulators may be considered to be a measure of accountability, as accountability is merely when an individual feels they may be evaluated, and that there may be consequences associated with such an evaluation (Siegel-Jacobs and Yates 1996).

Peytcheva, Wright and Majoor (2013) directly examine the influence process accountability, along with standard precision, on auditors' motivations and evidence demands. They theorize and find that the relationship between accounting standard precision and auditors' epistemic motivation and demand for audit evidence is driven by process accountability. Specifically, they find that less precise standards are associated with an increase in process accountability and, such heightened process accountability is associated with higher epistemic motivation in auditors, which in turn leads to a greater demand for audit evidence. These findings are consistent with the findings of prior psychology research on process accountability and suggest that less precise accounting standards may invoke a more effortful decision process than more precise accounting standards. If a more effortful decision process is the causal mechanism that drives the observed effects of standard precision on the decision at hand (e.g. management's financial reporting decision or auditor evidence demand), it is important to consider how this relationship will be impacted by decision processing mode.

The prior literature has examined how deliberative or intuitive processing influences decision outcome based on task characteristics (Inbar, Cone & Gilovich 2010; Hammond et al. 1987). These studies show that intuitive processing is less effective with tasks that can be decomposed and solved sequentially or mathematically. Making a financial reporting decision when applying a more precise standard involves gathering relevant information, calculating key values (if necessary) and comparing the values to the

reference point provided by the standard to determine the appropriate accounting treatment. This can be seen as akin to the sequential and mathematical task, described in the psychology literature as being less suited to intuitive processing. With these tasks, intuitive processing may produce a decision which deviates from the optimal decision. In contrast, intuitive processing performs well on judgment tasks, where the decision maker takes a more holistic approach (Inbar, Cone & Gilovich 2010). When making a financial reporting decision under less precise standards, a financial statement preparer must still gather relevant information to support the decision relative to the guidance of the standard, but then requires the application of judgment to determine the appropriate treatment. Accordingly, I hypothesize that decision processing mode and standard precision will interact to impact aggressive financial reporting.

> **Hypothesis 3:** Those relying on intuitive processing will be less (more) likely to make an unethical decision than individuals relying on deliberative processing when applying less precise (more precise) standards.

III. RESEARCH DESIGN

Design

The purpose of this study is to examine how standard precision and decision processing mode influence decision making. To address my research question, I use a 2 X 2 between-subjects experimental design, which manipulates the precision of accounting standard (less precise or more precise) and includes a prime designed to activate a specific decision processing mode (intuitive versus deliberative).

Participants

I recruited 493 total participants for the study through Amazon's Mechanical Turk propriety data collection service. Amazon's Mechanical Turk (AMT) is a crowdsourcing marketplace where requesters offer compensation to workers in exchange for completion of human intelligence tasks (HITs). AMT is becoming an increasingly common source for recruiting participants for academic studies in the field of accounting (Rennekamp 2012; Brasel et al. 2016). Further, studies performed using AMT have been shown to replicate a wide range of prior findings (Mason and Suri 2012). Additionally, it has been found that workers can be suitable proxies for non-experts, and exhibit higher motivation than students but at a lower cost (Farrell, Grenier and Leiby 2016).

The selection of study participants should be driven by the demands of the experiment being performed (Libby, Bloomfield and Nelson 2002). This particular research study aims to examine the underlying psychological effects of decision processing mode and standard precision. Notably, accounting standard precision is merely an extension of the substance-over-form debate which has presented in many fields (most commonly in ethics[16] and law[17]) that aims to address how individuals respond when rules emphasize substance over form. No particular subject-matter expertise is required to gain meaningful insight as to how my two independent variables, standard precision and decision processing mode, impact decision making. Successful completion of the research instrument only requires that the participants be fluent in English pay careful attention to the task. Accordingly, I restrict my sample to include only AMT workers within the United

[16] In the ethics literature, the substance-over-form debate is often looked at with respect to corporate codes of conduct (Raiborn and Payne 1990)

[17] In the litigation setting, jurors with no particular subject-matter expertise are routinely expected to make decisions in accordance with legal standards. See Katz (2004) and Grossman (2003) for discussion.

States who have an approval rating of at least 95%[18]. Participants indicated that they have completed an average of 4.0 business courses, and 2.3 accounting courses. Fifty-seven percent of the participants are male. Participants were compensated an effective hourly rate of $10.16, which is above the median wage for most AMT tasks (Horton and Chilton 2010).

Experimental Design

To examine this important issue, I use a modified version of the Agoglia, Doupnik and Tsakumis (2011) lease classification case. The Agoglia, Doupnik and Tsakumis (2011) case asks participants to assume the role of a financial statement preparer. Participants are then presented with lease classification criteria and asked how to classify the lease. To make this case more accessible to participants without accounting expertise, I modify the context to reflect an individual completing insurance paperwork about an automobile they have recently leased, rather than a financial reporting decision. Financial information within the case is also scaled accordingly to reflect the context.

The instrument begins with participants answering brief questions to gather demographic information. After completing the demographic data questions, participants are asked a series of five questions which either require them to compute five mathematical problems or to provide an emotive response when presented with a list of five terms. This task, which is the *DECISION_PROCESSING_MODE* manipulation, is designed to activate either an intuitive or deliberative processing mode in the participant.

[18] AMT approval ratings are calculated as the percentage of HITs completed which are approved for compensation by the HIT requester, signaling that the AMT worker has successfully completed the HIT.AMT guidelines allow HIT requesters to reject the work of an AMT worker who does not successfully complete the task (Paolacci, Chandler & Ipeirotis 2010). AMT workers with an approval rate in excess of 95% have a lower manipulation check failure rating and provide higher quality data than do other workers (Peer et al. 2014)

Participants are then informed that they have just leased an automobile and are completing required paperwork for their insurance company. The participant is told that the insurance company needs to gain an understanding of the structure of the lease agreement in order to calculate the appropriate insurance premium. The participant is then presented with the criteria for classifying the lease, which contains the *STANDARD_PRECISION* manipulation, as well as the definitions of lease term and bargain renewal option.

The case facts state that the automobile lease has a non-cancelable term of three years, with the option to renew the lease for an additional 18-month period at the end of the non-cancelable lease term. The participant must first assess if the rate for the additional year represents a bargain renewal option and thus should be included in the lease term, and then assess whether the ratio of the lease term to the economic useful life of the asset (six years) to determine the appropriate classification.

The participant is then presented with the insurance premiums resulting from each lease classification choice. There exists an economic incentive which favors classifying the lease as an operating lease, as classifying the lease as an operating lease results in a lower insurance premium. Each participant is then asked to indicate the appropriate classification of their automobile lease. The experiment ends with a series of debriefing questions. The full experimental instrument is included in the appendix.

Independent Variables

The first independent variable *DECISION_PROCESSING_MODE* is manipulated at two levels (*intuitive* and *deliberative).* The prime, which has been used to effectively stimulate decision processing mode in prior literature (Rose et al. 2017; Zhong, 2011) was

developed to stimulate intuitive or deliberative processing by encouraging participants to either calculate and report consensus (deliberative) or examine and reporting their feelings (intuitive) (Hsee and Rottenstreich 2004; Small, Loewenstein, and Slovic 2007). In both conditions, participants are presented with five questions designed to activate a specific mindset. In the *deliberative* condition, the five questions that require calculations (e.g. "if an object travels at five feet per minute, then by your calculations how many feet will it travel in 360 seconds?"). In contrast, in the *intuitive* condition, participants are asked five questions designed to elicit an emotive response (e.g. "when you hear the name "George W. Bush, what do you feel? Please use one word to describe your predominant feeling.")

The variable *STANDARD_PRECISION* is manipulated at two levels: *more precise* and *less precise* accounting standards. Participants in the *more precise* standard condition are provided with rules-based classification guidelines on which to base their lease classification decision. The terminology in the provided guidance is based on the lease capitalization criteria from ASC 840 *Leases.* The guidance instructs participants that the lease must be classified as a capital lease if the lease term is equal to 75% or more of the expected economic useful life of the asset. Participants in the *less precise* treatment condition are provided with principles-based classification guidelines based on the lease capitalization criteria from IAS 17 – *Accounting for Leases.* The guidance provided to participants states that the lease must be classified as a capital lease if the lease term is for the major part of the expected economic useful life of the asset.[19]

[19] It should be noted that a joint task force of the FASB and IASB recently issued revised standards for accounting for leases (FASB issued February 25, 2016 and IASB issued January 13, 2016). The new standards require all leases which do not meet the requirement of short-term leases (term less than 12-months) to be recognized on the balance sheet of the lessee. While the revised standards do substantially change the lease classification criteria, I do not believe this impacts the generalizability of the study as I am primarily interested in the effect of standard precision rather than the application of a particular accounting standard.

Measured Variables

Individuals may have a natural inclination to rely more heavily on deliberative or intuitive processing (Pacini and Epstein 1999). As a result, an individual with a strong preference for either intuitive or deliberative processing may be less responsive to the effects of priming. As a result, I also measure individual inclination to rely on a specific processing mode. Within the psychology literature, there are two commonly used measures of an individuals' inclination towards either deliberative or intuitive processing. The first measure uses a portion of the modified Rational-Experiential Index (REI) developed by Epstein, Pacini and Norris (1998),[20] which measures inclination to relying on intuitive processing. The REI scale asks the individual to self-report their agreement with a series of statements designed to capture intuitive behavior (e.g. "I can usually feel when a person is right or wrong even if I can't explain how I know"). The scale asks individuals to assess their agreement with the statements using a Likert-type scale where one represents "strongly disagree" and six represents "strongly agree." REI-scale items are listed in the appendix.

To calculate this measure, I partition scores into three groups to create an *REI_SCORE* indicator variable: *low REI* (individual mean score on the scale is greater than one standard deviation less than the overall mean response), *average REI* (individual mean score on the scale is within one standard deviation of the overall mean response), and *high REI* (individual mean score on the scale is greater than one standard deviation higher than the overall mean response). Low REI scores are indicative of a preference for deliberative processing, whereas a high REI score is indicative of a preference for intuitive processing.

[20] The modified Rational Experiential Index is based on a larger scale developed by Esptein, Pacini, Denes-Raj and Heieir (1996).

An average REI score suggests the individual may not exhibit a strong preference for either processing mode. The variable *REI_SCORE* is an indicator variable where participants whose mean score on the scale falls greater than one standard deviation below the overall mean (placing them in the low REI group) are assigned a zero. Participants within one standard deviation of the overall mean, indicative of an average REI score, are assigned a one, while participants whose mean score is greater than one standard deviation above the overall mean, considered to be high REI, are assigned a two.

The second measure of decision processing mode uses a series of logic puzzles introduced by Kahneman (2011). The series of three questions is designed such that an intuitive approach will likely yield an incorrect response to each question. For example, one question asks participants the cost of a ball, given two pieces of information: (1) the ball and a bat in total cost $1.10, and (2) the bat costs $1.00 more than the ball. The common intuitive response is that the ball costs $.10, which is incorrect as it violates the second requirement. Individuals who take a deliberative approach and use a mathematical equation should arrive at the correct answers of $.05. The Kahneman questions are listed in the appendix. The variable *KAHNEMAN_SCORE* is the number of correct responses to the questions (indicative of deliberative processing), ranging from zero to three. A low score on the Kahneman puzzles is indicative of a preference for intuitive processing, whereas a high score is indicative of a preference for deliberative processing.

While both of these measures have been used in the psychology literature to measure individual preference for either deliberative or intuitive processing, it should be noted that the outcome of these scales has not been examined jointly. If the scales are strong measures of inclination to rely on decision processing modes, there should be a significant

negative correlation between the two scales. Correlation analyses indicated that there is a significant negative correlation between the two variables ($r = -.190$, $p < .01$). That is, there is a strong inverse relationship between *KAHNEMAN_SCORE* and *REI_SCORE*. This suggests that both scales similarly capture an individual's disposition to rely on either intuitive or deliberative processing.

Dependent Variable

The dependent variable is the lease classification decision (*LEASE_CLASSIFICATION)* made by participants. Participants are asked to assess the likelihood that they would classify this lease as an operating lease or a capital lease on a 1-10 Likert-type scale where one represents "definitely classify as an operating lease" and ten represents "definitely classify as a capital lease." Choosing to classify the lease as an operating lease is the preferential treatment (as it yields lower insurance premiums for the participant), and is thus considered to be an aggressive classification choice.

IV. RESULTS

Attention, Manipulation and Completion Checks

In order to determine whether participants attended to the decision processing mode manipulation, the responses to the math problems and emotional responses were reviewed. All participants in both conditions provided appropriate responses. Consistent with prior research on decision processing mode, participants were not asked how the task impacted their processing, as these effects are subconscious and participants are unlikely to be aware of their decision processing (Zhong 2011; Rose et al. 2017). In order to determine whether participants attended to the *STANDARD_PRECISION*

manipulation, I asked each participant which standard precision criteria they received. Of the initial 493 participants, 120 failed to identify which standard precision criteria they had previously read (see Table 2.1). This represents a manipulation check failure rate of 24.3%, which is consistent with prior research involving Mechanical Turk participants (Goodman, Cryder & Cheema 2012). Participants who failed to successfully complete the manipulation check were removed from further analysis.

[INSERT TABLE 2.1 ABOUT HERE]

Standard Precision and Aggressive Reporting

To test my hypotheses, I use a 2 x 2 ANOVA. My first hypothesis predicts a main effect of standard precision on the decision to report aggressively. Specifically, hypothesis one predicts that less (more) precise accounting standards are associated with less (more) aggressive reporting. My results show there is no statistically significant difference between the less precise and more precise *STANDARD_PRECISION* treatment conditions ($F = 1.992$, $p = 0.159$). Results are presented in Table 2.2.

[INSERT TABLE 2.2 ABOUT HERE]

It is possible that the insignificant findings may relate to how participants in the less precise treatment condition interpret the phrase "for the major part of." It is important to ensure that the less precise standard precision manipulation does not create a different decision context for participants. For example, if a participant in the less precise treatment condition interprets the phrase "for the major part of" to be 65%, the resulting classification of the lease is as a capital lease. In contrast, if the participant interprets "for the major part of" to mean 80%, it would result in an operating lease. To examine whether the more and

less precise lease classification standards created different perceptions of the meaning of "for the major part," the research instrument includes the following question:

> *If a criterion for classifying a lease as a capital lease is if the lease term is for the major part of the economic life of the asset, what is the minimum percentage you would assign to the expression "for the major part?" (Please answer on a scale of 0% to 100%). _____ %*

Following Agoglia, Doupnik and Tsakumis (2011), I restrict the sample to include only those participants who indicated that their perception of "for the major part of" fell within the range of 70 – 80 percent. This ensures that I am only comparing participants who have similar perceptions of the lease criterion used in the experiment. After removing all participants in the less precise treatment condition whose interpretation of "for the major part of" fell outside of the range of 70 – 80 percent, the remaining sample included 77 participants in the less precise treatment condition (see Table 2.1). The restricted sample should provide a more meaningful basis for comparison.

Due to the removal of participants in the less precise treatment condition only (no such participants were removed from the more precise treatment condition), the cell sizes between treatment conditions are unbalanced (77 in the less precise condition, 170 in the more precise condition).[21] Due to the unbalanced cell sizes, the homogeneity of variance assumption of ANOVA is violated. This suggests that the use of a non-parametric test,

[21] It is important to consider whether the unbalanced cell sizes based on the reduction of the sample size due to interpretation of the phrase "for the major part of" presents any validity issues for my findings. To address this issue, I also reviewed the more precise treatment condition to assess their perception of the phrase. I find that 76 participants in the more precise condition interpreted the phrase "for the major part of" within the relevant range of 70-80%. This is consistent with the number of participants who interpreted the phrase within the relevant range in the less precise treatment condition. I reperform test of hypothesis one using a one-way ANOVA (untabulated), and find results consistent with the Kruskal-Wallis H test ($F = 2.984$, $p = 0.086$).

namely the Kruskal-Wallis H Test, is the most appropriate method of analysis. After restricting the sample to include only those participants in the less precise treatment condition who interpret "for the major part of" to be between 70 and 80 percent, I perform a Kruskal-Wallis H test to examine the relationship between standard precision and aggressive financial reporting. The Kruskal-Wallis H test showed that there is a significant difference in *LEASE_CLASSIFICATION* between the less precise and more precise *STANDARD_PRECISION* treatment conditions ($\chi^2 = 3.657$, $p = 0.056$), with a mean lease classification of 5.38 for more precise accounting standards and 6.31 for less precise accounting standards. Results are included in Table 2.3. These results suggest that financial statement preparers applying a less precise standard are less likely to report aggressively (classify the lease as an operating lease) than those applying more precise accounting standards. These findings provide support for hypothesis one.

[INSERT TABLE 2.3 ABOUT HERE]

Comparability

With respect to the discussion on shifting U.S. GAAP towards standards more comparable with IFRS, opponents of such convergence often suggest that less precise standards (principles-based) may result in less comparability across firms (Nelson 2003; Schipper 2003). If this is the case, it should result in a greater degree of variability in the classification decisions made by participants under less precise standards. As shown in Table 2.2, there is very little difference in the variability of *LEASE_CLASSIFICATION* as measured by the standard deviation. Levene's test for equality of variances reveals that there is no significant difference between the two groups ($F = 1.833$, $p = .177$). The results

suggest that there may not be empirical support for the notion that the application of less precise accounting standards will lead to a decline in comparability between firms.

Decision Processing Mode and Aggressive Reporting

The second hypothesis predicts that using intuitive (deliberative) processing will be associated with less (more) aggressive reporting decisions. The results reveal a statistically significant association between the independent variable *DECISION_PROCESSING_MODE* and the dependent variable *LEASE_CLASSIFICATION* ($F = 3.278$, $p < 0.1$). The results show a mean lease classification of 5.33 for the deliberative treatment condition, compared to a 5.92 mean lease classification for the intuitive treatment condition. The results show that, consistent with hypothesis two, use of intuitive processing is associated with less aggressive reporting decisions. Results are reported in Table 2.2.

It is possible that the marginal significance of these findings is attributable to strong individual preferences for one processing mode over another. While most individuals rely on a balanced approach between the two modes of decision processing and can be encouraged to use mode over the other by changing contextual features or priming, there are individuals who exhibit strong preferences for one mode over the other.[22] For those individuals with a strong preference for one mode, a prime may be less effective at stimulating the use of an alternative decision processing mode. As a result, considering

[22] Consider a student with a strong preference for analytical processing completing a timed standardized exam in mathematics. Time pressure is one task element which encourages the use of intuitive processing (Kahneman and Klein 2009). Many students will recognize the time constraint, and adjust their processing approach by relying on estimation or other time-saving heuristics that are part of intuitive processing. However, certain students will be committed to fully solving each problem mathematically, and may run out of time. These students exhibit strong preferences for deliberative processing.

individual preferences for decision processing mode may reveal an even stronger relationship between decision processing mode and aggressing reporting decisions.

As a test of the robustness of my findings, I examine the relationship between measures of individual preference for decision processing mode and aggressive reporting. To do so, I use two measures which capture an individual's preference to rely on a particular decision processing mode, *KAHNEMAN_SCORE* and *REI_SCORE.* Specifically, the variable *KAHNEMAN_SCORE* measures preference for deliberative processing, whereas *REI_SCORE* captures preference for intuitive processing.

I first examine the hypothesis using the variable *KAHNEMAN_SCORE.*[23] The results show that there is a statistically significant difference in *LEASE_CLASSIFICATION* based on *KAHNEMAN_SCORE* (chi-square = 10.932, $p < 0.05$). Specifically, there is a statistically significant difference in means between those who are highly intuitive (mean = 6.26) and those who are highly deliberative (mean = 4.87). Descriptive statistics are presented in Table 2.4 Panel A, with the Kruskal-Wallis H Test results in Panel B. Next, the variable *KAHNEMAN SCORE* is replaced with *REI_SCORE,* and the tests of hypothesis two are repeated. The results (descriptive statistics and Kruskal-Wallis H Test results are reported in Table 2.4 Panels C and D) reveal the same pattern of findings. Those who score as highly intuitive are significantly less likely to report aggressively than those who score as highly deliberative. Taken together, these results provide further support for the relationship between intuitive processing and less aggressive financial reporting as predicted in hypothesis two.

[23] The variable Kahneman Score represents the score on the three logic puzzles outlined in Kahneman (2011) from zero to three. A score of zero represents a highly intuitive individual, whereas a score of three shows a strong preference for deliberative processing.

[INSERT TABLE 2.4 ABOUT HERE]

These findings reveal that intuitive processing is associated with a reduction in aggressing reporting decisions. This is consistent with an emerging trend in the literature finding that intuitive processing, which encourages a holistic approach to decision making, can result in more ethical decision making. Accountants are presumed to rely more heavily on deliberative processing, as problems with math-like characteristics and computations require analytical processing (Griffith, Hammersley & Kadous 2014). However, these findings suggest that stimulating intuitive processing in accountants may result in a reduction in aggressive reporting decisions.

Joint Effect of Standard Precision and Decision Processing Mode

Hypothesis three predicts a disordinal interaction between standard precision and decision processing mode. However, I do not find any evidence of a significant interaction between *STANDARD_PRECISION* and *DECISION_PROCESSING_MODE* ($F=2.526$, $p = .599$). Results are reported in Table 2.2 and shown in Figure 2.1.

[INSERT FIGURE 2.1 ABOUT HERE]

To explore these findings, I examine the role of process accountability. I theorized that individuals provided with intuitive processing would result in a reduction in feelings of process accountability (due to the lack of observable process in intuitive processing) and that the reduction in process accountability would disrupt the observed relationship between less precise standards and a reduction in aggressive reporting.

In the experiment debriefing, participants were asked to complete a series of questions designed to measure their feelings of process versus outcome accountability. Participants were first asked to what extent their decision was based on a desire to avoid

questioning from someone who might evaluate their decision. There was no significant difference in the desire to avoid questioning from evaluators by treatment condition ($F = 0.013$, $p = .911$). Next, participants were asked to what extent they felt evaluators would focus on their decision process and their decision outcome. There was no significant difference in perception that evaluators would focus on decision process ($F = 0.093$, $p = .761$) or decision outcome ($F = .348$, $p = .556$) by treatment condition. These findings may help to explain the lack of disordinal interaction, as participants did not differ in accountability based on decision processing mode.

The results of this experiment reveal several interesting patterns. First, I find evidence which supports a main effect of standard precision. The results show that less precise standards are associated with less aggressive financial reporting decisions. This pattern of findings is consistent with hypothesis one, and the findings of prior literature (Agoglia, Doupnik & Tsakumis 2011), providing further support for the relationship between standard precision and aggressive financial reporting.

The results also show a significant association between decision processing mode and aggressive financial reporting. The findings reveal that intuitive processing is associated with less aggressive financial reporting decisions relative to deliberative processing. These findings support an emerging trend in the literature by refuting the notion that intuitive processing results in sub-optimal decision making.

V. CONCLUSION

The FASB has recently issued two new accounting standards, which were developed by joint task forces of the FASB and IASB, and are more principles-based in nature. As a result, empirical evidence supporting how the precision of accounting

standards influences decision making is of great importance in today's accounting environment. Prior literature supports the movement towards a more principles-based approach to standard setting, as it finds that less precise standards are more effective at reducing aggressive financial reporting relative to more precise, rules-based standards. The present study examines whether these findings hold in other decision contexts. Specifically, I examine how standard precision and decision processing mode impact the decision to report aggressively.

Consistent with prior literature (Psaros and Trotman 2004; Agoglia, Doupnik & Tsakumis 2011), I find that less precise accounting standards are associated with less aggressive financial reporting decisions relative to more precise accounting standards. My findings contribute to this stream of literature which suggests that migration of standards towards a less precise standard system may result in a reduction of aggressive financial reporting decisions. Further, I find no difference in the variability in financial reporting decisions reached under either standard. This finding helps to alleviate a concern that opponents such a migration have frequently expressed; that less precise standards will lead to greater variability in reporting decisions and threaten comparability across firms. These results may provide important insights which policy-makers may find of interest as they consider migrating additional accounting standards towards a more principles-based system.

The experiment also examined the role of dual processing theory. The results reveal a significant association between decision processing mode and aggressive financial reporting. Specifically, I find that intuitive processing is associated with less aggressive reporting decisions. This finding has important implications for practitioners, given that

accountants are presumed to rely on deliberative processing, as problems with math-like traits encourage an analytical approach (Griffith, Hammersley & Kadous 2014), which requires the use of deliberative processing. However, these findings suggest that encouraging intuitive processing in accountants may result in a reduction in aggressive reporting decisions. This finding has important implications for practitioners, as it suggests that effectively stimulating intuitive processing during the financial reporting process may reduce aggressive financial reporting decisions.

It is important to note that the case focuses on a specific context (lease classification), which has been revised by the joint task force of the FASB and IASB. To broaden the generalizability of my findings, future research could examine standard precision using alternative standards. Such research would enhance our understanding of the role that standard precision plays in influencing financial statement preparers' decisions to report aggressively. Another limitation of the study is that the study uses AMT participants to examine the influence of the precision of regulations and decision processing mode on aggressive decisions. It is possible that subjects with accounting expertise may respond differently to standard precision and processing mode primes due to experience and training. Future research could examine the effects of decision processing mode and standard precision with participants possessing greater accounting knowledge to test the generalizability of my findings.

PART 3

The Impact of Accounting Standard Precision on Auditor Judgment

I. INTRODUCTION

The U.S. Securities and Exchange Commission (SEC) has expressed support for the convergence of U.S. Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS) (SEC 2010). Traditionally, the Financial Accounting Standards Board (FASB), the standard setting body responsible for GAAP, has issued accounting standards that are more rules-based (more precise) in nature relative to the standards of IFRS. Opponents of the convergence argue that transitioning to a principles-based (less precise) standard system will pose a threat to audit quality, as less precise standards allow for greater management discretion, which may make it more difficult for auditors to challenge management's selection of accounting treatments (SEC 2010). Further, auditing the application of less precise standards may invite greater variability in auditor judgment which poses an additional threat to the comparability of financial statements across firms. Indeed, as the FASB considers migrating GAAP towards a less precise system of accounting standards, evidence supporting how auditors respond to the precision of accounting standards is of great importance.

The purpose of this study is to investigate how the precision of accounting standard impacts several dimensions of audit performance: constraint of aggressive financial reporting, susceptibility to influence by client management, and variability in auditor judgment. Several studies have examined auditor constraint of aggressive financial reporting under differently precise accounting standards finding mixed results (Backof, Bamber & Carpenter 2016; Peytcheva, Wright & Majoor 2013; Cohen et al. 2013). Backof, Bamber and Carpenter (2016) report evidence that auditors are less likely to constrain

aggressive financial reporting when applying less precise standards. In contrast, Peytcheva, Wright and Majoor (2013) and Cohen et al. (2013) provide evidence that less precise standards are associated with greater auditor constraint of aggressive financial reporting. The present study aims to further explore the relationship between standard precision and auditor constraint of aggressive financial reporting.

Beyond providing additional evidence with respect to auditor constraint of aggressive financial reporting, this study aims to address other aspects of audit judgment that may be impacted by the proposed migration of accounting standards (SEC 2010). Critics of such a transition argue that auditors will be more greatly influenced by the decisions of management when auditing the application of less precise standards (McCarthy and McCarthy 2014). As judgment plays a more prominent role in the audit process when auditing the application of less precise standards, auditors may become increasingly susceptible to judgment biases. Specifically, auditors may be more susceptible knowledge bias, whereby the auditor is unable to disregard knowledge of management's decision and incorporates that decision into their own judgment process (McDaniel and Kinney 1995; Kennedy 1995). Auditors perceive that they have less power to challenge the selection of aggressive accounting treatments chosen by management when applying less precise accounting standards (Backof, Bamber & Carpenter 2016). The perception of a reduction in power to challenge management's selection of accounting treatment, coupled with an increase in susceptibility to knowledge biases may result in greater likelihood that the auditor accepts management's choice of accounting treatment. I investigate whether auditors are less likely to challenge management's selection of accounting treatments when applying less precise accounting standards.

Opponents of the transition to a less precise standard system argue that comparability, the very purpose of establishing accounting standards (FASB 1980), is threatened by the level of judgment necessary in less precise standard systems. Specifically, there exist concerns that there will be increased variability in audit conclusions when auditing the application of less precise standards relative to more precise standards (SEC 2010). An increase in the variability of audit conclusions should result in a decrease in comparability across firms. Thus, it is important to consider how the precision of accounting standard will impact the variability of auditor judgment.

To examine these issues, I conduct a 2 X 3 between-subjects experiment where I manipulate the precision of accounting standard (either more precise or less precise) and knowledge of management's choice of accounting treatment (as either no knowledge of management's classification, classification set 1, or classification set 2). The study uses a lease classification audit task used in prior standard precision research (Backof, Bamber & Carpenter 2016; Agoglia, Doupnik & Tsakumis 2011). One hundred and forty-one undergraduate and graduate accounting students participated in a lease classification case where they are asked to assume the role of staff auditor. The dependent variable captures the auditor's assessment of the appropriate lease classification on a 1-10 Likert-type scale where one represents an operating lease (an aggressive classification) and ten represents a capital lease (the conservative treatment).

Consistent with expectations, I find that the precision of accounting standards is a significant determinant of auditor constraint of aggressive financial reporting. Specifically, when auditors apply less precise accounting standards, they are more likely to constrain aggressive financial reporting by management. This finding supports the notion that

transitioning to a less precise standard system may result in better constraint of aggressive financial reporting by staff auditors. Further, I find no evidence of increased variability in auditor judgment when applying less precise standards. Rather, I find that auditor judgment varies to a lesser extent when applying less precise accounting standards. Lastly, I find no evidence that auditors are more likely to accept management's selection of accounting treatment when auditing the application of less precise standards. This may alleviate concerns that auditors will be less likely to challenge aggressive financial reporting decisions by management under less precise standards.

This study is important for several reasons. This study examines the potential audit consequences of the FASB's ongoing trend of converging U.S. GAAP to IFRS through the issuance of less precise accounting standards. First, the study contributes to the stream of literature which demonstrates that auditors may better constrain aggressive financial reporting, which supports the transition to a less precise standard system. Secondly, the study has important implications for regulators, as the findings address two major concerns voiced by opponents of the transition (SEC 2010): that less precise standards will lead to greater variability in auditor judgment, and that auditors' ability to challenge aggressive financial reporting will decrease under less precise standards. I find no evidence to support either of these concerns.

The remainder of this study is organized as follows. Section II provides background information and develops our hypotheses. Sections III describes the experiment used to test our hypotheses. Section IV presents the results of the study. Conclusions are presented in Section V.

II. BACKGROUND AND HYPOTHESIS DEVELOPMENT

Accounting Standard Precision

In recent years, joint task forces comprised of members of the FASB and IASB have released updated standards on revenue recognition and leases, which aim to bridge the fundamental differences in the accounting standards of U.S. GAAP and IFRS related to revenue recognition. These revised standards have spurred discussion regarding a potential migration of U.S. GAAP towards a standard system that is comprised of less precise accounting standards, and the potential benefits and drawbacks of such conversion. The SEC summarized the main issues with such conversion as follows:

> Commenters who preferred IFRS's approach asserted that it is less complex than U.S. GAAP and allows companies to capture the substance of transactions. On the other hand, commenters who preferred U.S. GAAP's approach expressed that IFRS relies too much on management discretion, thereby increasing the potential for opportunistic accounting; creating challenges for auditors… and reducing comparability. (SEC 2010)

This statement makes reference to the important role that professional judgment plays in the application of less precise standards, which may be simultaneously the greatest benefit and largest drawback to conversion. The latitude in selecting an accounting treatment in less precise standards provides the best opportunity for a transaction to be recorded in a manner which reflects its underlying economic substance (SEC 2003). However, the increased role of judgment is also cited as a weakness of less precise standards. Former SEC Chief Accountant Robert Herdman noted that a less precise approach "requires greater discipline by the corporate community, the accounting profession, private sector standard-setting bodies, and, indeed, the SEC staff" to maintain consistency (Herdman, 2002). Moreover, opponents of less precise standards suggest that external regulators and auditors may face greater opposition from financial statement

preparers choosing an aggressive treatment under less precise standards, since less precise standards makes more treatment options defensible based on how judgment is applied by different individuals (Maines et al. 2003; Hail, Luez & Wysocki 2010; Wüstemann and Wüstemann 2010; Backof, Bamber & Carpenter 2016).

Several studies on accounting standard precision examine factors which affect a financial statement preparers reporting decision: incentives to report aggressively (Psaros and Trotman 2004), auditor mindset (Jamal and Tan 2010), and audit committee strength (Agoglia, Doupnik & Tsakumis 2011). Psaros and Trotman (2004) use a consolidated accounting case where incentives exist for management not to consolidate. They find that marginally more participants elect not to consolidate when presented with more precise standards. Jamal and Tan (2010) examine the impact of auditor mindset and standard precision on managers' aggressive reporting. They find that less precise standards are associated with less aggressive reporting when the auditor has a principles-oriented mindset. Agoglia, Doupnik and Tsakumis (2011) find that participants applying a less precise standard are significantly less likely to report aggressively than those applying a more precise standard. They find that audit committee strength is a significantly associated with less aggressive financial reporting under more precise standards, but do not find a statistically significant relationship under less precise standards. Overall, these studies provide support for the general notion that less precise standards are associated with less aggressive financial reporting by financial statement preparers.

Standard Precision and Auditor Constraint of Aggressive Financial Reporting

A recent study surveyed experienced auditors to assess auditor's perceptions of the impact of removing more precise standards from current guidance in ten different

accounting contexts (McEnroe and Sullivan 2012). While the authors theorized that auditors may exhibit a preference for less precise standards due to the flexibility it provides to ensure financial statements are not misleading, their results support the opposite. Rather, they find that auditors preferred inclusion of more precise standards in nearly all contexts. Specifically, auditors perceive that transitioning to less precise standards will hinder comparability across firms, verifiability, and will limit the ability of financial information to provide relevant information and a faithful representation of the underlying economic event.

A recent study provides empirical support for the findings of McEnroe and Sullivan (2012). Backof, Bamber and Carpenter (2016) examine auditor application of more precise or less precise accounting standards and the effect of judgment frameworks on auditor constraint of aggressive financial reporting. They find that auditors are less likely to constrain aggressive financial reporting by management under less precise standards, and that the use of a judgment framework increases auditor constraint of aggressive financial reporting. The findings are attributed to the perception of a reduced ability to resolve conflicts with management when auditors are applying less precise standards. The authors find that the relationship between less precise accounting standards and the reduction in the ability to constrain aggressive financial reporting under less precise standards is due to auditor perceptions of a loss of power in their ability to challenge aggressive financial reporting decisions by management. This perspective is supported by a stream of research which shows that, when incentives are present, auditors permit aggressive reporting through interpretation of less precise standards (Hackenbrack and Nelson 2006; Nelson, Elliott & Tarpley 2002; Kadous, Kennedy & Peecher 2003).

Notably, the Backof, Bamber and Carpenter (2016) study uses audit partners and managers as participants. It is important to consider whether the observed relationship between less precise standards and decreased auditor constraint of aggressive financial reporting due to a perceived loss of power to challenge management is an effect that may be limited to upper-level auditors. Staff auditors may not consider a potential loss in negotiation power when applying less precise standards, as challenging management's selection of treatments is a task that would likely not be performed until reaching the level of audit manager (Abdolmohammadi 1999). As the review of leases is an audit task generally performed by staff auditors (Abdolmohammadi 1999), it is important to consider whether these findings will hold when less experienced auditors are performing the same audit procedure.

Two studies present evidence that less precise standards are associated with better auditor constraint of aggressive financial reporting. Cohen et al. (2013) examine the effect of financial regulatory regime strength along with standard precision on auditor constraint of aggressive financial reporting. They find that auditors are more likely to constrain aggressive financial reporting by management under less precise standards, under both weaker and stronger financial regulatory regimes. Peytcheva, Wright and Majoor (2013) develop and test a theoretical model which explains the relationship between accounting standard precision and auditor cognitive processing and information search. Specifically, their model explains the relationship between standard precision, auditor epistemic motivation and the amount of audit evidence demanded, which influences audit

conclusions.[24] The results reveal that less precise standards are associated with higher process accountability, which influences the extent of auditor epistemic motivation, which then affects the amount of evidence demanded by the auditor. Taken together, these studies provide compelling evidence which suggests that auditors are more likely to constrain aggressive financial reporting when evaluating evidence relative to less precise accounting standards. These findings inform hypothesis one.

> **Hypothesis 1:** Staff auditors applying less precise (more precise) accounting standards will be more likely (less likely) to constrain management's aggressive financial reporting.

Auditor Susceptibility to Client Influence

A popular criticism of less precise standards is that transitioning to less precise standards will decrease the auditor's ability to challenge management's selection of preferential accounting treatments (Gibbons, Salterio & Webb 2001). The SEC acknowledges this concern:

> The international standards (IFRS) are widely viewed as less specific and providing less prescriptive guidance than U.S. GAAP (i.e., IFRS are more principles-based), as well as more subjective primarily due to more use of fair value measurements. The downgrading of verifiability as a key concept guiding accounting standard setting and the resulting focus on fair value measurement significantly impairs the ability of an auditor to limit opportunistic actions of management and improve financial reporting (SEC 2010).

A recent study finds evidence that supports this concern. Backof, Bamber and Carpenter (2016) find that auditors perceive a loss of power to challenge aggressive financial reporting when auditing the application of less precise standards, and that less precise

[24] Audit Standard 15 requires the auditor to gather sufficient, appropriate evidence to support his or her conclusion. Thus, the auditor's information search and evidence gathering process directly affects the quality of the audit.

standards are associated with less auditor constraint of aggressive financial reporting. This suggests that auditors are more likely to accept the financial reporting decisions made by management when applying less precise standards.

It is also possible that auditors will be influenced by having knowledge of management's judgments, and that this will increase the likelihood that the auditor accepts management's aggressive financial reporting decisions. While the expectation is that auditors perform all of their work independent of the client, an extensive body of literature shows that auditors are unable to disregard knowledge of management's assessment and that such knowledge biases auditor judgment. If management provided information includes an aggressive financial reporting decision, any judgment bias which reduces the likelihood that the auditor will challenge the aggressive decision may pose a threat to audit quality. It is important to understand whether auditors are more susceptible to knowledge bias when evaluating the application of either more precise or less precise accounting standards.

Auditors are expected to assess whether the financial statements of the client represent the underlying economic reality of the client's financial position. This involves performing a systematic analysis of financial information which is generated by the client during the course of their operations. Given that an auditor is expected to be an objective third-party evaluator, understanding whether auditors are susceptible to biases is of great importance. An auditor is generally provided with summary financial information prepared by the management of the audit client. The auditor then has the responsibility to obtain evidence in order to assess whether the information provided by the client is fairly stated in accordance with relevant accounting standards. In this case, the audit client's

management has the benefit of acting as the "first mover" on information, where they are the first party to process, prepare, and conclude on financial statement information. The auditor becomes the "second mover," whereby the auditor is processing information with knowledge of the conclusions reached by management (Earley, Hoffman & Joe 2008). Given that the auditor is using the information provided by management as a starting point and gathering evidence to either support (or refute) the information, this leaves the auditor highly susceptible to allowing management's information to influence their own conclusions (McDaniel and Kinney 1995; Kennedy 1995).

Prior literature finds that auditors are unable to disregard management provided information in forming their own audit judgments (Kinney and Ueker 1982; Biggs and Wild 1985; Heintz and White 1989; McDaniel and Kinney 1995). A more recent study, Earley, Hoffman and Joe (2008) extend these findings to the internal control context. The study examines the effects of knowledge bias on auditors' judgments of the severity of identified internal control deficiencies. They find that auditors are more likely to agree with the severity classification of management when provided with management's classification of the deficiency prior to making their own classification of the severity.

Due to the increased role of judgment required to audit of the application of less precise standards, auditors may become increasingly susceptible to the effects of knowledge bias. This may result in audit judgments which are more consistent with the financial reporting decisions made by management. Accordingly, I hypothesize that auditor judgment of the appropriate accounting treatment will be influenced by management's own assessment to a greater extent when auditors are evaluating the evidence relative to less precise standards.

Hypothesis 2: Auditor assessment of the appropriate lease classification will be influenced to a greater extent by management's classification when the auditor is relying on less precise standards relative to when relying on more precise standards.

Accounting Standard Precision and Audit Judgment Variability

The FASB defines comparability as "the qualitative characteristic that enables users to identify and understand similarities in and differences among items" (FASB 2010) and is the primary reason for the development of accounting standards (FASB 1980). Opponents of transitioning GAAP towards a more principles-based standards system argue that less precise accounting standards present a significant threat to the comparability of financial statements at two points in the reporting process. First, less precise standards are said to increase the role of judgment in the reporting process, and the increased latitude will allow management to select preferential accounting treatments.[25] Secondly, auditing the application of less precise standards will require greater application of auditor judgment, which will introduce greater variability in auditing conclusions. The SEC echoed this concern:

> IFRS's less detailed and prescriptive guidance, coupled with any diversity of perspectives amongst issuers, auditors, and regulators on a global basis may affect the comparability of financial statements prepared under IFRS. For example, in the auditing context, commenters raised concerns regarding the possibility that each audit firm will develop its own interpretations of IFRS, resulting in reduced comparability across companies using different auditors. (SEC 2010)

[25] To date, there is no empirical support for this concern. Agoglia, Doupnik and Tsakumis (2011) finds that less precise standards are associated with greater comparability in financial statement preparers' decisions. Hunter (2017) finds that there is no difference in the variability of decisions reached under either standard precision.

Given the importance of comparability in the audit process, it is important to consider how the precision of accounting standards may influence the comparability of audit judgment.

Most theories of rational choice commonly used to explain judgment decision making assume that an equivalent process will be used by different individuals to yield the same decision outcome (Tversky and Kahneman 1974). Yet, there is substantial evidence which demonstrates that under uncertainty, the systematic ordering of preferences may differ considerably from the preferences dictated by models of rational choice (Tversky, Slovic & Kahneman1990). This phenomenon is referred to as procedural variance, where the decision process itself varies based on task attributes. Specifically, two distinct task types are introduced: matching and choice[26]. In a choice task, the individual is presented with a complete set of information and must then weight the attributes and choose the superior alternative. It is important to note that in a choice task, the individual will have all relevant information to make a decision, and still need to apply judgment in order to reach a conclusion. In contrast, in a matching task, the individual does not have the complete set of information and must calculate the appropriate value, which can then serve as the basis for the decision process. Matching tasks require computation of attribute values, which then require comparison to a reference point to determine the appropriate decision. This

[26]Tversky, Sattath and Slovic (1988) illustrate the difference between a choice and matching task using the following example: Approximately 600 people are killed each year in Israel in traffic accidents. The government is considering implementing two programs to reduce the number of casualties. Program A is expected to lead to 570 casualties and cost $12 million, while Program B is expected to lead to 500 casualties and cost $X. In a matching task, the individual is asked to provide an estimate of X that makes the programs equivalent. The individual need only compute the cost of saving one life in Program A ($400,000) and then multiple the cost per life saved in Program A by number of lives saved in Program B to determine the value which makes the programs equivalent ($40,000,000). The only variability in responses would be due to computational errors. Rather, in a choice task, the individual is provided with the cost of Program B ($55 million) and must determine whether saving 70 additional lives is worth the additional $43 million. This requires the individual to weigh the financial cost and the value placed upon saving a human life. There will be significant more variability in decisions made under the choice task based on how the decision maker weighs variables according to their personal preferences.

contrasts with choice tasks, in that once the individual has computed all relevant information, and compared information to the reference point, there is no need to apply judgment.

The discussion of procedural variance is notable to the discussion on standard precision, given that a decision context under more precise standards resembles a quantitative decision, more akin to a matching task. In contrast, the decision context under less precise standards requires qualitative judgment, which is a choice task.[27]

In a more precise matching task, an auditor needs to calculate the relevant value based on client-provided information, and compare the calculated value to the reference.[28] The auditor does not need to exercise a significant amount of judgment to determine the appropriate classification. In contrast, in a choice task with less precise standards, an auditor must gather all relevant information, and then weigh the importance of each piece of information and apply professional judgment to reach their conclusion. The types of information which may be considered as part of that process includes the intent of management with respect to the transaction, the conclusion reached by management for the specific transaction, as well as the incentives of management which may impact their reporting decisions.[29] How this information is weighed is a matter of professional

[27] The distinction is best illustrated by the lease classification decision under Accounting Standards Codification (ASC) 840 - *Accounting for Leases* relative to International Accounting Standard (IAS) 17 – *Leases.* Under SFAS 13, an auditor needs to compare the lease specifics to a series of quantitative thresholds (e.g. if the lease term is greater than 75% of the economic useful life of the asset it shall be classified as a capital lease). In contrast, under IAS 17, an auditor must exercise significantly more judgment to determine whether the lease meets the qualitative guidance of the standard (e.g. if the lease term is for the major part of the economic useful life of the asset it shall be classified as a capital lease).
[28] It should be noted that the lease term includes any period covered by a bargain renewal option (the option to renew the lease at significantly less than fair market value). "Significantly less than fair market value" is considered to be less than 90% of fair market value.
[29] Anderson, Kadous and Koonce (2004) examine the role of management's incentives and the quantification of information on auditor judgments. They find that management's incentives alone influences auditors' assessments of the persuasiveness of management's explanations.

judgment, and may differ from auditor to auditor. Accordingly, it is reasonable to expect to see a greater degree of variability in the decisions reached by auditors under less precise standards relative to more precise standards.

Hypothesis 3: Less precise standards (more precise standards) will be associated with greater (less) variability in auditor judgment.

III. RESEARCH DESIGN

Participants in the study are 228 undergraduate and graduate accounting students at a private business university. Participants indicated they had completed an average of 8.45 accounting courses, 1.13 auditing courses, and 65% of participants indicated that they were graduate students. At the time that the study was conducted, 47% of participants had completed an auditing internship. There is no difference in the level of experience across the treatment conditions, and the participants are randomly assigned to treatment conditions (described below).

Accounting students are an appropriate proxy for investigating the judgment of staff auditors in this particular setting for two reasons. First, as mentioned above, approximately 47% of the students had already completed an auditing internship where they received firm sponsored training and on-the-job experience relating to performing substantive testing procedures and evidence evaluation for tasks commonly assigned to entry-level auditors. Based on discussions with audit firm personnel at the partner and manager level at various Big 4 firms, the level of difficulty of the task is well-aligned for entry-level staff auditors. Further, the review of lease contracts is an appropriate task for entry-level staff auditors (Abdolmohammadi 1999). The concepts of auditor judgment and evidence evaluation are discussed by faculty during participants' coursework. Thus, these participants have

approximately the level of knowledge and experience that would be expected of an entry-level auditor.

Second, prior researchers conclude that students can be appropriate surrogates for auditors in decision-making studies (Ashton and Kramer 1980; Peecher and Solomon 2001; Libby, Bloomfield and Nelson 2002). As this experiment focuses specifically on the judgments of staff auditors, accounting students are an acceptable proxy to represent newly hired audit professionals for the purposes of this experiment.

Design

To examine the issue of how standard precision influences auditor judgment, I conduct a 2 x 3 between-subjects experiment where I manipulate standard precision at two levels (more precise and less precise) and knowledge of client classification at three levels (no knowledge, classification set 1, classification set 2). The experiment asks the participants to assume the role of a staff auditor who has been assigned to participate in the audit of a fictitious company. The participant is told that they have been assigned to audit the classification of leases which the company entered into during the year.

The first variable *STANDARD_PRECISION* is manipulated at two levels: more precise standard and less precise standard. Participants in the more precise standard condition are provided with more precise lease capitalization criteria from ASC 840 *Leases* (i.e. lease must be classified as a capital lease if the lease term is equal to 75% or more of the expected economic useful life of the asset). Participants in the less precise standard condition are provided with less precise lease capitalization criteria from IAS 17 –

Accounting for Lease (i.e. lease must be classified as a capital lease if the lease term is for the major part of the expected economic useful life of the asset).[30]

The second variable of interest *KNOWLEDGE_OF_CLIENT_CLASSIFICATION* is manipulated at three levels: no classification provided, classifications set 1 provided, and classification set 2 provided. In the no classification provided conditions, participants are provided the lease information for a series of leases, where the client's classification of the lease is omitted. In the two treatment conditions which provide participants with the client's lease classification, half of the participants receive a more aggressive lease classification (i.e. the lease is classified as an operating lease) and half receive a more conservative lease classification (i.e. the lease is classified as a capital lease). The treatment conditions were labeled as "Classification Set 1" and "Classification Set 2" in order to distinguish which classification sets were presented to participants for each lease. A design of this variable is presented in Table 3.1.

[INSERT TABLE 3.1 ABOUT HERE]

Each participant receives identical case materials, except for the modifications due to the experimental manipulations described above. The full research instrument is included in the appendix. Participants are told that they are to assume the role of the staff auditor of a fictitious company, ABC Company, and that they have been assigned to audit the classification of leases by their audit supervisor. Participants are then provided with lease classification criteria, receiving either the more precise or the less precise standard

[30] It should be noted that a joint task force of the FASB and IASB recently issued revised standards for accounting for leases (FASB issued February 25, 2016 and IASB issued January 13, 2016). The new standards require all leases which do not meet the requirement of short-term leases (term less than 12-months) be recognized on the balance sheet of the lessee. While the revised standards do substantially change the lease classification criteria, I do not believe this impacts the generalizability of the study as I am primarily interested in the effect of standard precision rather than the application of a particular accounting standard.

precision manipulation. Each participant is then told that for their assessment of the client's classification of the lease, they are to assume that the only relevant criterion is the ratio of the lease term to the expected economic useful life of the leased asset. Participants are provided with the following definitions, which are consistent with both ASC 840 and IAS 17:

> *"Lease term" is defined as the fixed non-cancelable term of the lease plus all periods covered by bargain renewal options.*
>
> *"Bargain renewal options" allow the lessee to renew the lease for a rental sufficiently lower than the fair rental of the property such that exercise of the option appears, at the inception of the lease, to be reasonably assured.*

For each of the four leases included in the task, participants are provided with the lease information for the selected lease, and the knowledge of client classification manipulation (either not provided, classification set 1 or classification set 2). Each lease is designed to be near the margin of a capital or operating lease, based on the term of the lease and bargain renewal option relative to the economic useful life of the underlying asset. Each lease decision provides the participant with the non-cancelable lease term, as well as the option to renew the lease for an additional term. The participant must first judge whether the rate for the additional year represents a bargain renewal option to determine if the additional year should be included in the lease term, and then judge whether the lease terms meets the criteria for capitalization provided by the lease standard.

Participants are also provided a summary of the financial impact of each of the two accounting treatments. The summary demonstrates that the capitalization of the lease provides less favorable financial results relative to classifying the lease as an operating

lease. Thus, the auditor is aware that the client has an incentive to record the lease as an operating lease.

Participants are then asked to assess the appropriate classification of each lease on a 1-10 Likert-type scale where 1 represents "Definitely classify as an operating lease" and 10 represents "Definitely classify as a capital lease. The participant's assessment of how he or she would likely classify each lease is the dependent variable (*ASSESSMENT_OF_LEASE_CLASSIFICATION)*.

IV. RESULTS

The debriefing questions included a manipulation check to ensure that participants attenuated to the standard precision manipulation. The manipulation check asked participants to indicate whether the criterion for classifying leases as a capital lease was that the lease term is equal to 75% or more of the economic useful life of the asset, or for the major part of the economic useful life of the asset. Results indicate that 87 participants either failed to correctly identify the lease criterion which had been provided or did not successfully complete the research instrument. There was no difference in accuracy between treatment groups. Participants who failed to attenuate to the standard precision manipulation or fully complete the instrument were removed from further analysis, resulting in a final sample of 141 participants.

To examine how participants responded to each individual lease, I perform a 2 X 3 X 4 repeated measures ANOVA. The first between-subjects variable, *STANDARD_PRECISION,* has two levels (less precise accounting standard and more precise accounting standard) and the second between subjects variable, *KNOWLEDGE_OF_CLIENT_CLASSIFICATION*, has three levels (no classification

provided, classification set 1, and classification set 2). The within-participants variable, *LEASE*, is an indicator variable representing each of the four leases assessed (leases one through four). The analysis reveals there is a significant main effect of *LEASE* ($F = 4.574$, $p < .05$), as well as a significant interaction between *LEASE* and *STANDARD_PRECISION* ($F = 9.883$, $p < .01$). The results are presented in Table 3.2.

[INSERT TABLE 3.2 ABOUT HERE]

This suggests that there is a significant difference in how participants are interpreting each of the four leases. This finding is consistent with expectations, given that the leases differed in both the ratio of the lease term to economic useful life and the embedded information about management's classification of the lease. Therefore, to address the specific hypotheses regarding the effects of standard precision, I conduct separate tests, described below, for each of the leases. For two of the leases, it is evident that participants did not respond to the manipulations and that their lease classification is based on case information that was not measured by the research instrument, due to low adjusted R-squared values (adjusted R-squared = 0.000 and -0.024, respectively) and insignificant independent variables (all p-values > .1). Therefore, I consider these cases to be a failed manipulation and exclude them from further analysis. The remaining analysis will focus on leases one and two.

Standard Precision and Auditor Constraint of Aggressive Financial Reporting

Hypothesis one predicts that auditors will better constrain aggressive financial reporting when auditing the application of less precise standards. The results, presented in Table 3.3 Panels C and D, provide support for hypothesis one. The results reveal a significant relationship between *STANDARD_PRECISION* and

ASSESSMENT_OF_LEASE_CLASSIFICATION. Specifically, the results reveal that for lease one, auditors are more likely to conclude that the appropriate lease classification is an operating lease (which is the client-preferred treatment) when evaluating evidence under more precise accounting standards (mean = 4.76) relative to auditing the application of less precise accounting standards (mean = 6.83, F = 19.769, p < .01). The pattern of findings is consistent for lease two (more precise mean = 4.55, less precise mean = 6.60, F = 19.989, p < .01). Thus, hypothesis one is supported. This suggests that staff auditors may better constrain management aggressive financial reporting when auditing the application of less precise accounting standards.

[INSERT TABLE 3.3 ABOUT HERE]

Standard Precision and Auditor Susceptibility to Client Influence

The second hypothesis examines whether auditor susceptibility to influence by the client differs by standard precision. Hypothesis two predicts that auditors will be more greatly influenced by management's classification of the leases when auditing the application of less precise accounting standards. Hypothesis two is tested using a two-way MANOVA where the independent variables are *KNOWLEDGE_OF_CLIENT_CLASSIFICATION* and *STANDARD_PRECISION* and the dependent variable is *ASSESSMENT_OF_LEASE_CLASSIFICATION* for each lease. The findings, shown in Tables 3.4 and 3.5, reveal no significant main effect of knowledge of management's classification on auditor assessment of the appropriate lease classification in either lease one or two (p-value = 0.488 and 0.301 respectively). Additionally, there is no significant interactive effect of *KNOWLEDGE_OF_CLIENT_CLASSIFICATION* and

STANDARD_PRECISION on auditor assessment of the appropriate lease classification for either lease one or two (p-value = 0.148 and 0.557 respectively).

[INSERT TABLES 3.4 AND 3.5 ABOUT HERE]

The lack of significant findings in support of hypothesis two has important implications for the debate on standard precision. A common criticism of less precise standards is that auditors will have less power to challenge the accounting treatment selection of management. Backof, Bamber and Carpenter (2016) reveal that auditors perceive that a transition to less precise standards would lessen the power that auditors have to challenge management on their selection of aggressive accounting positions. The findings reveal that there is no significant difference in auditor constraint of aggressive financial reporting between auditors who are aware that management has taken an aggressive position, a conservative position, or importantly, those who are unaware of management's classification. There was no observed difference in auditor assessment of the appropriate classification between the control condition, where the participants had no knowledge of how management classified the lease, and those receiving either management's conservative or aggressive classification of the lease. This suggests that while there are still differences in auditor assessment of the appropriate lease classification due to standard precision, these differences are not attributable to an increase in management's influence on auditor judgment. This finding may help to alleviate concerns that auditors will be less inclined to challenge management's aggressive financial reporting under less precise standards.

Standard Precision and Variability in Auditor Judgment

Hypotheses three investigates whether auditor assessments vary to a greater extent when the auditor is evaluating evidence relative to differently precise accounting standards. To address this hypothesis, I conduct a one-way MANOVA along with Levene's test of equality of variances where the independent variable is *STANDARD_PRECISION*, which is manipulated at two levels (more precise and less precise), and the dependent variables are the assessments of the appropriate lease classification for both leases one and two (*ASSESSMENT_OF_LEASE_CLASSIFICATION)*. The results of the analysis are presented in Table 3.6. The results reveal that there is significantly greater variability in the assessment of the appropriate assessment of lease classification when applying more precise standards for both lease one (F-value = 2.904, $p < 0.1$) and least two (F-value = 6.091, $p < 0.05$). This finding suggests that there is little support for the concern that auditing the application of less precise accounting standards will results in greater variability in auditor judgments. Rather, the findings suggest that auditor' assessments actually vary to a greater extent when relying on more precise standards.

[INSERT TABLE 3.6 ABOUT HERE]

This finding addresses a common concern regarding less precise accounting standards. Opponents of less precise accounting standards argue that auditor judgment will vary to a greater extent when applying less precise standards. This argument has important implications for audit quality, as an important element of audit judgment is that it is performed to enable another competent auditor to review the same information and deem the conclusion reasonable. I do not find evidence to support this concern. In fact, the results suggest that auditor judgments are actually more consistent when applying less precise standards.

IV. CONCLUSION

This paper examines the role of standard precision in auditor constraint of aggressive financial reporting. This study is motivated by concerns that audit quality will suffer due to the increased role of judgment in the audit process when applying less precise accounting standards. As the FASB has recently issued two revised accounting standards which are less precise in nature relative to the rules-based standards that previously characterized U.S. GAAP, this issue is incredibly important. To address this issue, I examine the effect of standard precision on auditor constraint of aggressive financial reporting, as well as investigate two common criticisms of less precise accounting standards including variability in auditor judgment and judgment.

Consistent with my expectations, I find that staff auditors (proxied for by undergraduate and graduate accounting students) are more likely to constrain aggressive financial reporting by management under less precise accounting standards. These findings support the notion that migrating U.S. GAAP to a less precise standard system may result in better auditor constraint of aggressive financial reporting by management. Further, I find no evidence that there will be an increase in the variability of auditor judgment when applying less precise standards. Rather, I find evidence showing that auditor judgments vary to a lesser extent when applying less precise standards. Importantly, I also find that staff auditors applying less precise standards are no more influenced by the classification of management than those applying more precise accounting standards.

This finding has important implications for the discourse on standard precision. To understand the implications, it is important to consider these findings relative to those of Backof, Bamber and Carpenter (2016), which examines the same issue also using a

modified version of the Agoglia, Doupnik and Tsakumis (2011) lease classification case and measures the same dependent variable. Importantly, their study participants are audit partners and managers. Their findings differ from the present study in that they find that auditors better constrain management's aggressive financial reporting when applying more precise standards. Through measures captured during their debriefing analysis, they find that the observed relationship between less precise standards and a reduction in auditor constraint of aggressive financial reporting is attributable to the perception of a loss of power to challenge management's selection of an aggressive classification when auditing the application of less precise standards.

It is possible that the discrepancy in findings is attributable to the level of audit experience of study participants. Entry-level staff auditors may be unlikely to consider a potential loss in negotiation power when applying less precise standards, as challenging the accounting treatments chosen by the client is a task suited to much more experienced auditors (Abdolmohammadi 1999). Absent concerns about the loss of power when applying less precise standards, it is unclear whether the relationship between standard precision and auditor constraint of aggressive financial reporting will hold. I present evidence showing that for staff auditors, less precise standards are associated with greater auditor constraint of aggressive financial reporting. This suggests that the effects of standard precision on auditor constraint of aggressive financial reporting may differ with auditor experience level.

This study makes several important contributions to both research and practice. I find evidence that the proposed migration of U.S. GAAP towards a global set of accounting standards will not necessarily result in less auditor constraint of attempts to report

aggressively by management. Further, this study aims to address two important concerns regarding the proposed migration from a more precise standard system to a less precise standard system (SEC 2010). Contrary to concerns that less precise standards will lead to greater variability in audit judgments, I find evidence that there is less variability in auditor judgment when auditing the application of less precise standards. Further, opponents of the transition argue that auditors will lose the ability to challenge management's selection of aggressive treatments under less precise standards (SEC 2010), and prior literature finds that expert auditors perceive this to be the case (Backof, Bamber & Carpenter 2016). I find no evidence to suggest that staff auditors are more likely to accept the classification decisions of management under less precise standards. This study provides important insights for academics, auditors, and regulators as they further explore the implications of potential standard migration.

It is important to note that the case used in the study focuses on a specific context (lease classification), which has been revised by the joint task force of the FASB and IASB. To broaden the generalizability of my findings, future research could examine standard precision using alternative settings. Also, the use of accounting students as a proxy for entry-level auditors does not consider how firm training on audit judgment process may impact the judgment process of staff auditors. Further, it has been suggested that a migration to less precise standards would require a shift in audit planning and task delegation requiring more experienced auditors to evaluate areas subject to less precise standards, due to the greater involvement of judgment. Therefore, future research could examine auditor judgment at varying levels throughout the firm to better understand how judgment differs by staff level, and the effect this has on auditor performance.

FIGURE 1.1

Visual Fit of Lease Classification Decision Planned Contrast

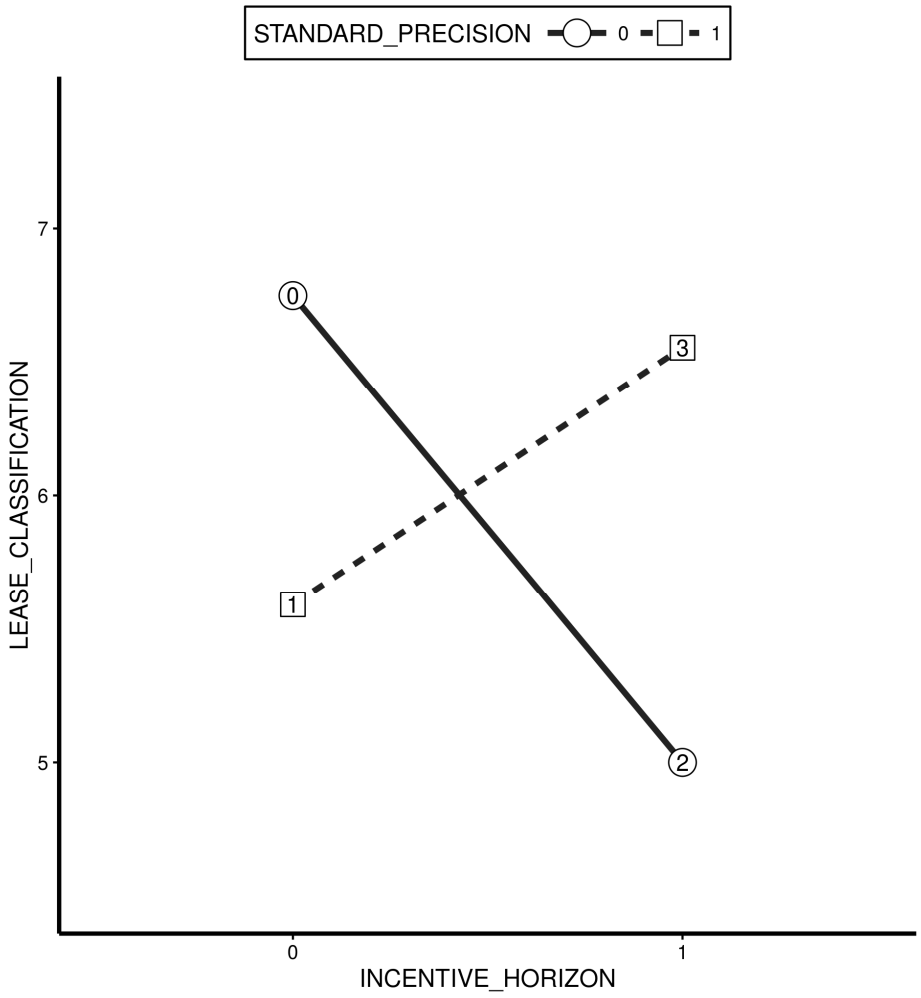


Figure Notes: The independent variable *INCENTIVE_HORIZON* is an indicator variable where zero represents the short-term treatment condition, and one represents the long-term treatment condition. The variable *STANDARD_PRECISION* is an indicator variable where zero represents the more precise treatment condition, and one represents the less precise treatment condition. The dependent variable is *LEASE_CLASSIFICATION.* This figure presents the planned contrast for financial statement preparers' lease classification decision. Specifically, when the *INCENTIVE_HORIZON* is short-term (long-term), financial statement preparers will be less likely (more likely) to make an aggressive financial reporting decision when *STANDARD_PRECISION* is less precise than will preparers applying a more precise standard. The planned contrast weights are: Cell 0 (+1), Cell 1 (-1), Cell 2 (-1), Cell 3 (+1). Results are presented in Table 1.

FIGURE 2.1

Impact of Standard Precision and Decision Processing on Lease Classification Decision

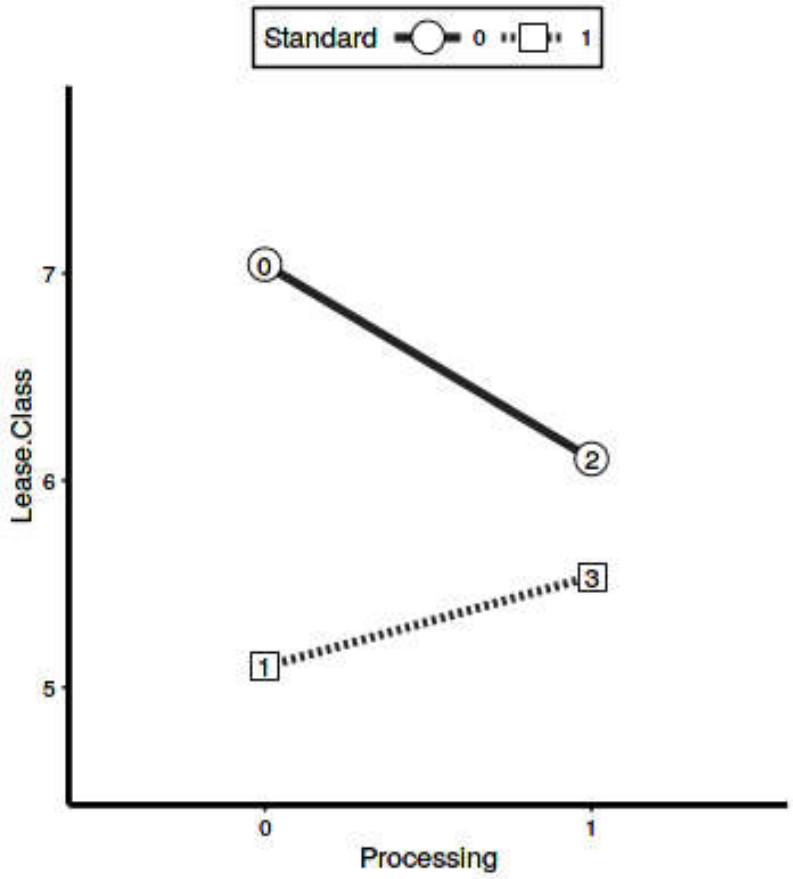


Figure Notes: Figure one depicts the relationship between standard precision and decision processing mode.

TABLE 1.1
Lease Classification Decision Descriptive Statistics and Results

Panel A: Mean (Standard Deviation) [Number of participants]

	INCENTIVE_HORIZON: Short-Term	***INCENTIVE_HORIZON: Long-Term***	**Row Means**
STANDARD_PRECISION: Less Precise	6.75 (3.10) [38]	5.00 (3.64) [33]	5.93 (3.45) [71]
STANDARD_PRECISION: More Precise	5.59 (3.55) [39]	6.56 (3.46) [36]	6.05 (3.52) [75]
Column Means	6.16 (3.36) [77]	5.81 (3.61) [69]	6.00 (3.47) [146]

Panel B: ANOVA Results

Factor	df	Mean Square	F-value	p-value[a]
INCENTIVE_HORIZON (IH)	1	5.59	0.47	0.493
STANDARD_PRECISION (SP)	1	1.42	0.12	0.729
IH X SP	1	67.03	5.68	0.019
Error	142	11.81		

Panel C: Planned Contrasts

	F	p-value
H1a and H1b: When the incentive horizon is short-term (long-term), financial statement preparers will be less likely (more likely) to make an aggressive financial reporting decision when applying less precise accounting than will preparers applying a more precise standard	5.67	0.018**

Table Notes: This table presents the results for testing of hypotheses 1a and 1b for the full sample.
[a] Reported p-values are two-tailed.

*, **, and *** represent significance at 10%, 5%, and 1%, respectively.

TABLE 1.2
Lease Classification Decision Descriptive Statistics and Results
Analysis based on Perception of "For the Major Part of"

Panel A: Mean (Standard Deviation) [Number of participants]

	INCENTIVE_HORIZON: Short-Term	***INCENTIVE_HORIZON: Long-Term***	**Row Means**
STANDARD_PRECISION: Less Precise	6.91 (3.15) [17]	5.11 (3.62) [9]	6.288 (3.37) [26]
STANDARD_PRECISION: More Precise	5.59 (3.55) [39]	6.56 (3.46) [36]	6.05 (3.52) [75]
Column Means	5.99 (3.46) [56]	6.27 (3.50) [45]	6.11 (3.46) [101]

Panel B: ANOVA Results

Factor	**df**	**Mean Square**	**F-value**	**p-value[a]**
INCENTIVE_HORIZON (IH)	1	3.12	0.260	0.611
STANDARD_PRECISION (SP)	1	0.07	0.006	0.941
IH X SP	1	34.27	2.860	0.094
Error	97	11.98		

Panel C: Planned Contrasts

	F	p-value
H1a and H1b: When the incentive horizon is short-term (long-term), financial statement preparers will be less likely (more likely) to make an aggressive financial reporting decision when applying less precise accounting than will preparers applying a more precise standard	2.860	0.094*

Table Notes: This table presents the results for testing of hypotheses 1a and 1b for restricted sample. For the above analyses, the sample is restricted to include only participants in the less precise *STANDARD_PRECISION* condition who indicated that their interpretation of the phrase "for the major part of" refers to a percentage within the relevant decision range of 70 – 80%.

[a] Reported p-values are two-tailed.

*, **, and *** represent significance at 10%, 5%, and 1%, respectively.

TABLE 1.3

Debriefing Analysis

Panel A: Mean (Standard Deviation)

	INCENTIVE_HORIZON Short-Term			*INCENTIVE_HORIZON Long-Term*		
Debriefing Item	**Less Precise**	**More Precise**	**Total**	**Less Precise**	**More Precise**	**Total**
Regulator Second-Guessing	5.43 (3.25)	5.69 (3.25)	5.57 (3.23)	5.06 (2.75)	5.08 (3.08)	5.07 (2.91)
Economic Substance	7.65 (2.18)	7.67 (2.37)	7.66 (2.26)	6.58 (2.82)	7.39 (2.41)	7.00 (2.62)
Negative Consequences from CEO	3.50 (2.49)	4.49 (3.11)	4.00 (2.85)	4.42 (2.68)	4.72 (3.03)	4.58 (2.85)
Present Company Information Favorably	5.84 (3.02)	6.13 (2.79)	5.99 (2.89)	5.76 (2.91)	6.00 (2.62)	5.88 (2.74)

Table Notes: This table presents the results of our supplemental analyses. The above measures were captured during experiment debriefing.

TABLE 2.1

Sample Reduction

	STANDARD_PRECISION Less Precise	*STANDARD_PRECISION More Precise*	**Total**
Initial Sample	254	239	493
Removed due to Manipulation Check Failure[a]	51	69	
Sample[b]	203	170	373
Removal of Participants Who Indicate their Perception of "For the Major Part of" Falls Outside of 70-80% Range[c]	126	--	
Final Sample[d]	77	170	247

Table Notes: The table provides information on the sample reduction.

[a] Of the 493 study participants, 120 failed to correctly identify which standard precision criteria they had been provided on which to base their lease classification. These participants were removed from further analysis.
[b] This sample is used for the initial testing of hypothesis one and hypothesis two (presented in Table 2).
[c] It is important to ensure that the less precise standard treatment condition does not alter the decision context of the participant. In order to do so, participants who indicated that their interpretation of the phrase "for the major part of" falls outside of the relevant decision range of 70 – 80% are removed from the analysis.
d This sample is used for additional testing of hypothesis one (presented in Table 3).

TABLE 2.2
Lease Classification Decision Descriptive Statistics and Results

Panel A: Mean (Standard Deviation) [Number of participants]

	DECISION_PROCESSING_MODE		
	Deliberative	**Intuitive**	**Row Means**
STANDARD_PRECISION Less Precise	5.46 (2.911) [100]	6.19 (2.987) [103]	5.83 (2.965) [203]
STANDARD_PRECISION More Precise	5.18 (3.172) [88]	5.59 (3.031) [82]	5.38 (3.102) [170]
Column Means	5.33 (3.031) [188]	5.92 (3.014) [185]	5.62 (3.033) [373]

Panel B: ANOVA Results

Factor	**df**	**Mean Square**	**F-value**	**p-value[a]**
STANDARD_PRECISION (SP)	1	18.183	1.992	0.159
DECISION_PROCESSING_MODE (DP)	1	29.917	3.278	0.071*
DP X SP	1	2.526	.277	0.599
Error	372	9.127		

R-Squared = 0.016

Table Notes: The table presents the results of a 2 X 2 ANOVA designed to test my hypotheses.

[a] Reported p-values are two-tailed.

*, **, and *** represent significance at 10%, 5%, and 1%, respectively.

TABLE 2.3

Standard Precision Comparison of Means

Sample reduced to include only those in the less precise condition who interpret the phrase "for the major part of" to be within the relevant range of 70-80%

Panel A: Mean (Standard Deviation) [Number of participants]

	LEASE_CLASSIFICATION
STANDARD_PRECISION *Less Precise*	6.31 (2.862) [77]
STANDARD_PRECISION *More Precise*	5.38 (3.102) [170]
Total	5.67 (3.053) [247]

Panel B: Kruskal-Wallis H Test Results

Factor	**Chi-Square**	**df**	**Asymp. Sig.**
STANDARD_PRECISION (SP)	3.657	1	.056*

Table Notes: This table presents the results for testing of hypothesis one for the restricted sample. For the above analyses, the sample is restricted to include only participants in the less precise *STANDARD_PRECISION* condition who indicated that their interpretation of the phrase "for the major part of" refers to a percentage within the relevant decision range of 70 – 80%. Due to the unbalanced cell sizes, a non-parametric test is required to test the difference in cell means.

[a] Reported p-values are two-tailed.

*, **, and *** represent significance at 10%, 5%, and 1%, respectively.

TABLE 2.4
Decision Processing Mode Comparison of Means

Panel A: Kahneman Score Mean (Standard Deviation) [Number of participants]

	KAHNEMAN_SCORE				
	0	**1**	**2**	**3**	**Row Means**
STANDARD_PRECISION Less Precise	6.49 (2.625) [70]	5.70 (2.580) [33]	5.39 (3.350) [44]	5.45 (3.185) [56]	5.83 (2.965) [203]
STANDARD_PRECISION More Precise	5.91 (2.770) [45]	6.00 (3.052) [33]	5.61 (3.166) [46]	4.17 (3.143) [46]	5.38 (3.102) [170]
Column Means	6.26 (2.686) [115]	5.85 (2.808) [66]	5.50 (3.240) [90]	4.87 (3.214) [102]	5.62 (3.033) [373]

Panel B: Kahneman Score Kruskal-Wallis H Test Results

Factor	**Chi-Square**	**df**	**Asymp. Sig.**
Kahneman Score (KS)	10.932	3	0.012**

Panel C: REI Score Mean (Standard Deviation) [Number of participants]

	REI_SCORE			
	Low	**Average**	**High**	**Row Means**
STANDARD_PRECISION Less Precise	4.83 (3.114) [23]	6.01 (2.888) [164]	5.44 (3.386) [16]	5.83 (2.965) [203]
STANDARD_PRECISION More Precise	3.67 (3.199) [27]	5.72 (2.941) [130]	5.46 (3.526) [13]	5.38 (3.102) [170]
Column Means	4.20 (3.182) [50]	5.88 (2.911) [294]	5.45 (3.387) [29]	5.62 (3.033) [373]

Panel D: REI Score Kruskal-Wallis H Test Results

Factor	**Chi-Square**	**df**	**Asymp. Sig.**
REI_SCORE (REI)	12.187	2	0.002***

Table Notes: This table presents the results for testing of hypothesis two using alternative measures of decision processing mode. The variables *REI_SCORE* and *KAHNEMAN_SCORE* were captured during experiment debriefing. Due to the unbalanced cell sizes, a non-parametric test is required to test the difference in cell means.

[a] Reported p-values are two-tailed.

*, **, and *** represent significance at 10%, 5%, and 1%, respectively.

TABLE 3.1

Experiment Design - Influence of Knowledge of Client Classification by Lease

	KNOWLEDGE_OF_CLIENT_CLASSIFICATION		
	Classification Not Provided	**Classification Set 1: Mgmt. Classified Lease as:**	**Classification Set 2: Mgmt. Classified Lease as:**
Lease 1	Not provided	Capital Lease	Operating Lease
Lease 2	Not provided	Operating Lease	Capital Lease
Lease 3	Not provided	Operating Lease	Capital Lease
Lease 4	Not provided	Capital Lease	Operating Lease

Table Notes: This table presents the organization of the variable *KNOWLEDGE_OF_CLIENT_CLASSIFICATION.* In the classification not provided condition, participants were not presented with the client's classification of the lease along with the relevant information. In the remaining two treatment conditions (classification set 1 and classification set 2), participants were provided with the client's classification of the lease (either a capital or operating lease) along with the lease information.

TABLE 3.2

Descriptive Statistics and Test of Lease

Panel A: Mean *ASSESSMENT_OF_LEASE_CLASSIFICATION* (Standard Deviation) [Number of Participants]

	STANDARD_PRECISION: More Precise				**STANDARD_PRECISION: Less Precise**				
	No Class. Provided	Mgmt. Class. Set 1	Mgmt. Class. Set 2	Total	No Class. Provided	Mgmt. Class. Set 1	Mgmt. Class. Set 2	Total	Case Total
Lease 1	3.93 (2.523) [28]	4.77 (2.808) [35]	5.68 (2.750) [25]	4.76 (2.758) [88]	7.15 (2.477) [20]	6.56 (2.502) [16]	6.71 (2.733) [17]	6.83 (2.532) [53]	5.54 (2.850) [141]
Lease 2	4.14 (2.902) [28]	4.20 (2.576) [35]	5.48 (2.786) [25]	4.55 (2.775) [88]	6.60 (2.703) [20]	6.44 (2.394) [16]	6.76 (2.223) [17]	6.60 (2.421) [53]	5.32 (2.822) [141]
Lease 3	5.89 (2.859) [28]	6.51 (2.759) [35]	7.08 (2.216) [25]	6.48 (2.661) [88]	7.20 (2.285) [20]	7.06 (2.265) [16]	6.24 (2.562) [17]	6.85 (2.365) [53]	6.62 (2.551) [141]
Lease 4	5.89 (2.767) [28]	6.11 (2.774) [35]	6.40 (2.754) [25]	6.12 (2.741) [88]	6.55 (2.685) [20]	6.69 (2.469) [16]	5.82 (2.698) [17]	6.36 (2.602) [53]	6.21 (2.683) [141]

Panel B: Repeated Measures ANOVA

Factor	df	Mean Square	f-value	p-value[a]
LEASE	1	37.458	4.574	.034**
LEASE X *STANDARD_PRECISION* (*SP*)	1	80.938	9.883	.002***
LEASE X *KNOWLEDGE_OF_CLIENT_CLASS.* (*K*)	2	7.045	.860	.425
LEASE X *SP* X *K*	2	1.740	.212	.809
Error	135	8.190		

Table Notes: This table presents the results of a 2 X 3 X 4 repeated measures ANOVA. The analysis includes the two dependent variables, *STANDARD_PRECISION* and *KNOWLEDGE_OF_CLIENT_CLASSIFICATION,* as well as an indicator variable for each of the four leases (*LEASE)*. This test is designed to examine whether there is a significant effect of lease. The results reveal a significant effect of the indicator variable, *LEASE.* This suggests there is a significant difference in how participants interpret each lease.

[a] Reported p-values are two-tailed.

*, **, and *** represent significance at 10%, 5%, and 1%, respectively.

TABLE 3.3

Auditor Constraint of Aggressive Financial Reporting Descriptive Statistics and Results

Panel A: Descriptive Statistics – Mean (Standard Deviation) [Number of Participants]

	ASSESSMENT_OF_LEASE_CLASSIFICATION	
	***LEASE* 1**	***LEASE* 2**
STANDARD_PRECISION More Precise	4.76 (2.758) [88]	4.55 (2.775) [88]
STANDARD_PRECISION Less Precise	6.83 (2.532) [53]	6.60 (2.421) [53]
Total	5.54 (2.850) [141]	5.32 (2.822) [141]

Panel B: ANOVA Results – Lease 1

Factor	df	Mean Square	F-Value	p-value
STANDARD_PRECISION	1	141.575	19.769	.001***
Error	139	7.162		

R-Squared = 0.125 (Adjusted R-Squared = 0.118)

Panel C: ANOVA Results – Lease 2

Factor	df	Mean Square	F-Value	p-value
STANDARD_PRECISION	1	140.141	19.989	.001***
Error	139	7.011		

R-Squared = 0.126 (Adjusted R-Squared = 0.119)

Table Notes: This table presents results of testing for hypothesis one, which predicts that less precise accounting standards will be associated with greater auditor constraint of aggressive financial reporting. The results support hypothesis one.
[a] Reported p-values are two-tailed.
*, **, and *** represent significance at 10%, 5%, and 1%, respectively.

TABLE 3.4

Auditor Susceptibility to Client Influence Descriptive Statistics and Results

Lease 1

Panel A: Mean *ASSESSMENT_OF_LEASE_CLASSIFICATION* (Standard Deviation) [Number of Participants]

	KNOWLEDGE_OF_CLIENT_CLASSIFICATION			
	No Classification Provided	**Classification Set 1**	**Classification Set 2**	**Row Total**
STANDARD_PRECISION More Precise	3.93 (2.523) [28]	4.77 (2.808) [35]	5.68 (2.750) [25]	4.76 (2.758) [88]
STANDARD_PRECISION Less Precise	7.15 (2.477) [20]	6.56 (2.502) [16]	6.71 (2.733) [17]	6.83 (2.532) [53]
Column Total	5.27 (2.952) [48]	5.33 (2.819) [51]	6.10 (2.757) [42]	5.54 (2.850) [141]

Panel B: ANOVA Results

Factor	df	Mean Square	F-value	p-value[a]
STANDARD_PRECISION (*SP*)	1	132.296	18.771	0.001***
KNOWLEDGE_OF_CLIENT_CLASS. (K)	2	5.083	0.721	0.488
SP X *K*	2	13.676	1.940	0.148
Error	135	7.048		

R-Squared = 0.163 (Adjusted R-Squared = 0.132)

Table Notes: This table presents results of testing for hypothesis two, which predicts a disordinal interaction between the precision of accounting standard and knowledge of the client's classification on auditor constraint of aggressive financial reporting for lease one. I find no evidence of an interaction.
[a] Reported p-values are two-tailed.
*, **, and *** represent significance at 10%, 5%, and 1%, respectively.

TABLE 3.5

Auditor Susceptibility to Client Influence Descriptive Statistics and Results

Lease 2

Panel A: Mean *ASSESSMENT_OF_LEASE_CLASSIFICATION* (Standard Deviation) [Number of Participants]

	KNOWLEDGE_OF_CLIENT_CLASSIFICATION			
	No Classification Provided	**Classification Set 1**	**Classification Set 2**	**Row Total**
STANDARD_PRECISION More Precise	4.14 (2.902) [28]	4.20 (2.576) [35]	5.48 (2.786) [25]	4.55 (2.775) [88]
STANDARD_PRECISION Less Precise	6.60 (2.703) [20]	6.44 (2.394) [16]	6.76 (2.223) [17]	6.60 (2.421) [53]
Column Total	5.17 (3.048) [48]	4.90 (2.707) [51]	6.00 (2.623) [42]	5.32 (2.822) [141]

Panel B: ANOVA Results

Factor	df	Mean Square	F-value	p-value[a]
STANDARD_PRECISION (*SP*)	1	129.722	18.570	0.001***
KNOWLEDGE_OF_CLIENT_CLASS. (K)	2	8.465	1.212	.301
SP X *K*	2	4.110	.588	.557
Error	135	6.986		

R-Squared = 0.154 (Adjusted R-Squared = 0.123)

Table Notes: This table presents results of testing for hypothesis two, which predicts a disordinal interaction between the precision of accounting standard and knowledge of the client's classification on auditor constraint of aggressive financial reporting for lease two. I find no evidence of an interaction.
[a] Reported p-values are two-tailed.
*, **, and *** represent significance at 10%, 5%, and 1%, respectively.

TABLE 3.6

Variability in Auditor Assessment of Appropriate Lease Classification

Panel A: Descriptive Statistics – Mean (Standard Deviation) [Number of Participants]

Lease	*STANDARD_PRECISION* More Precise	*STANDARD_PRECISION* Less Precise	Overall
***LEASE* 1**	4.76 (2.758) [88]	6.83 (2.532) [53]	5.54 (2.850) [141]
***LEASE* 2**	4.55 (2.775) [88]	6.60 (2.421) [53]	5.32 (2.822) [141]

Panel B: Levene's Test of Equality of Error Variances

Lease	df	F-value	Significance
LEASE 1	1	2.904	0.091*
LEASE 2	1	6.091	0.015**

Table Notes: This table presents results of testing for hypothesis three, which predicts that there will be significantly greater variation in auditor assessment of the appropriate lease classification when applying less precise accounting standards. Contrary to my expectations, I find evidence that there is significantly greater variation in auditor assessment of the appropriate lease classification when applying more precise standards. *, **, and *** represent significance at 10%, 5%, and 1%, respectively.

APPENDIX A

Research Instrument

General Instructions

Thank you for your participation in this study. The purpose of the study is to examine the judgments accountants make about accounting rules. As you are aware, proper application of accounting rules is important for reliable financial reporting. Your participation should take approximately 15 minutes.

It is important that you work independently. Furthermore, since there may be others from your industry in this study at a later date please do not talk with your colleagues about the study after your participation. If you have any questions, please contact the lead researcher at <jthibodeau@bentley.edu>. Your participation in this study is voluntary and sincerely appreciated and by participating you consent to be included in the study.

Please open envelope #1 and begin the questionnaire.

Please answer the following questions about you

1) What is your gender? _____Male _____Female

2) What is your current job title?

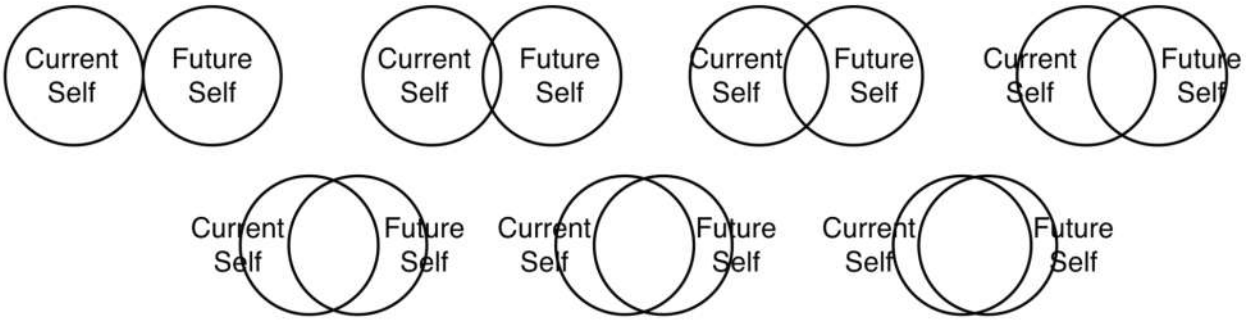
_____

3) How many years have you worked at your current job? _____ years

4) How many years of professional **work experience** do you have overall? _____ years

5) Please rate your perceptions about your similarity to your future self. (Recent research suggests that adulthood is characterized by stability in identity, and the important characteristics that make you the person you are right now are established early in life and are fixed by the end of adolescence.) [Recent research suggests that adulthood is characterized by instability in identity, and the important characteristics that make you the person you are right now are likely to change radically throughout your life.]

Think about the important characteristics that make you the person you are now and circle the one diagram out of the seven below that best reflects your opinion about the degree of similarity between the person you are now (your current self) and the person you will be in 10 years (your future self).



The following pages contain information about two accounting issues. Please read the information carefully because you will be asked to make several decisions based on this information.

Information

Assume that you are the **controller for ABC Company**. There are two important issues related to R&D spending and leases that require you to make decisions.

Background Information

During the fourth quarter of 2013, the CEO called a meeting to discuss projected earnings. During the meeting, the CEO mentioned that the currently projected 2013 earnings of $80 million will fall approximately $1 million below the consensus analyst forecast of earnings, which is $81 million.

In addition, you realize that unless actual 2013 earnings reach $82 million, the CEO will not receive any bonus for 2013. The CEO's bonus structure is as follows: bonus of 30% of base pay if actual 2013 earnings reach the $82 million threshold, and an additional bonus of 1% of base pay for every $100,000 increment above $82 million. For example, if actual 2013 earnings reach $82.4 million, the CEO's bonus would be calculated as follows: Bonus = 30% of base pay + 4% of base pay.

Executives' bonuses and a significant portion of their salaries are paid in stock (that can be sold at any time.)[that cannot be sold for 5 years after receipt.] The CEO currently holds a large volume of shares that (can be sold at any time)[cannot be sold for several more years], and these shares represent a meaningful portion of his portfolio.

Issue: R&D Spending

The CEO has indicated that the firm needs to consider strategic spending cuts. The upper management team has already drastically reduced spending throughout the company, and it appears that the only remaining place where cuts could be tolerated would be to reduce research and development (R&D) spending for the remainder of 2013. The board agrees with this assessment.

The total remaining R&D budget for 2013 is $4 million, and this $4 million expense was included when calculating the earnings projection of $80 million. You are worried about potential loss of competitiveness in the near term if 2013 R&D is reduced. You estimate that for every $100,000 cut in the remaining R&D budget, the 'worst case' outcome is a 1% chance of losing ground to competitors. In other words, in the 'worst case' a $100,000 cut to R&D would mean that there is still a 99% chance that no ground will be lost to competitors. As another example, if R&D is reduced by $1 million, in the worst possible case there would be a 10% chance of losing ground to competitors and a 90% chance that no ground will be lost to competitors.

Issue: Accounting for Leases

Applicable accounting standards require leases to be classified and accounted for as either **capital leases** or **operating leases**. For purposes of this study, there is **only one criterion** that you will need to consider in determining whether a lease should be classified as a capital lease or as an operating lease.

Criterion for Classifying Leases

- If at its inception, a lease meets the following criterion, it must be classified as a **capital lease** by the lessee:

  • ***The lease term is (equal to 75% or more)[for the major part] of the estimated economic life of the leased property.***

    • **"Lease term"** is defined as the **fixed non-cancelable term of the lease plus all periods covered by bargain renewal options**.

    • **"Bargain renewal options"** allow the lessee to renew the lease for a **rental sufficiently lower than the fair rental of the property such that exercise of the option appears, at the inception of the lease, to be reasonably assured.**

- If at its inception, a lease does not meet the above criterion, it must be classified as an **operating lease**.

The Financial Statement Effects of Leases

- **Capital leases** are accounted for by recording an **asset and a liability on the balance sheet** at the present value of the minimum lease payments. Lease payments are allocated between a reduction of the lease liability and **interest expense**. In addition, **depreciation expense** related to the leased asset is recognized over the lease term.

- **Operating leases** are accounted for as **rental expense** on the income statement. No asset or liability is recorded on the balance sheet.

Equipment Lease Decision

ABC Company has entered into a lease for new equipment that has an **estimated economic life of 10 years**. The lease has a **fixed non-cancelable term of 5 years**, with a rental of $220,000 payable at the beginning of each month.

At the end of the initial non-cancelable term, the lease agreement provides ABC Company with the **option to renew the lease for an additional 3-year period** with the monthly rental payment to be set at **92% of the fair rental value** for the equipment at that time.

If classified as a **capital lease**, the Company will recognize an **asset and a liability in the amount of $11,379,623** at the inception of the lease. In 2013, **interest expense and depreciation expense totaling $3,641,479** will be recognized.

If classified as an **operating lease**, the Company will recognize **rental expense of $2,640,000** in 2013 and no asset or liability.

Thus, a capital lease will **increase liabilities by $11,379,623** and **increase 2013 expenses by $1,001,479.**

The 2013 earnings projection of $80 million assumed the highest potential expense for leases (i.e., $3,641,479). Thus, classifying the lease as an operating lease will increase projected 2013 earnings to $81 million.

Case Questions:

As controller, you have two decisions to make. Recall that currently projected 2013 earnings of $80 million are $1 million below the consensus forecast, currently projected earnings are $2 million below the threshold for the CEO's bonus that is paid in stock that (can be sold at any time)[cannot be sold until 5 years after receipt], and there are potential effects of R&D cuts on competitiveness. You must decide on the proper accounting treatment for the lease entered into by ABC Company and the amount to cut (if any) from the R&D budget.

- Based on the information presented on the preceding pages, circle a number on the scale below to indicate the likelihood that you would classify this lease as an operating lease or as a capital lease.

1	2	3	4	5	6	7	8	9	10
Definitely classify as an **Operating Lease**								Definitely Classify as a **Capital Lease**	

- Based on the information presented on the preceding pages, how much money, if any, would you be willing to cut from the remaining R&D budget of $4 million? (enter an amount in the range $0-$4 million)

  $_____

When you have completed the two questions, please return the materials to envelope #1 and open envelope #2.

Questions

1) Based on information provided in this questionnaire, **what was the criterion you needed to consider in classifying a lease as a capital lease or an operating lease (check one)**?

_____ The lease term is **for the major part** of the estimated economic life of the leased property.
_____ The lease term is **equal to 75% or more** of the estimated economic life of the leased property.

2) Based on information provided in this questionnaire, what was the form of executives' bonus payments (check one)?

_____ Executive's bonuses and a significant portion of their salaries are paid in stock **that can be sold at any time.**

_____ Executive's bonuses and a significant portion of their salaries are paid in stock **that cannot be sold until 5 years after receipt.**

3) Based on information provided in this questionnaire, what does research say about your future self (check one)?

_____ Recent research suggests that adulthood is characterized by **stability** in identity, and the important characteristics that make you the person you are right now are **established early in life and are fixed by the end of adolescence**.

_____ Recent research suggests that adulthood is characterized by **instability** in identity, and the important characteristics that make you the person you are right now are **likely to change radically throughout your life**.

4) In your opinion, did ABC Company's option to renew the equipment lease at the end of its fixed non-cancelable term for 92% of the equipment's fair rental value represent a **bargain renewal option?** Circle the number that best represents your response

1 2 3 4 5 6 7
Not at all *Definitely*

5) Indicate the extent to which you agree with the following statement: "Classifying the equipment lease as an **operating lease** (rather than as a capital lease*) would improve the financial position and results of operations reflected in ABC Company's financial statements."*

1	2	3	4	5	6	7
Strongly Disagree						*Strongly Agree*

6) If a criterion for classifying a lease as a capital lease is if the lease term is **for the major part** of the economic life of the asset, what is the minimum percentage you would assign to the expression "**for the major part**?"
(Please answer on a scale of 0% to 100%). _____ %

There may have been a number of factors you considered while arriving at your lease classification decision, some of which may have influenced your decision more than others. We would like you to consider several potential factors to help us understand which factors, relative to others, *most* influenced your decision. Using the scales below, please indicate the extent to which each of the following influenced your decision.

Relative to other factors, how much was your lease classification decision influenced by your desire to:

7) Report the economic substance of the lease in the financial statements

1	2	3	4	5	6	7	8	9	10
Little influence relative to other factors									Very strong influence relative to other factors

8) Avoid possible second-guessing of my decision by external watchdogs such as the Securities and Exchange Commission

1	2	3	4	5	6	7	8	9	10
Little influence									Very Strong

relative to other factors

influence relative to other factors

9) Avoid potential negative consequences from the CEO

1 2 3 4 5 6 7 8 9 10

Little influence

Very Strong influence relative to other factors

10) Present the company's financial position and profitability as favorably as the circumstances will allow

1 2 3 4 5 6 7 8 9 10

Little influence

Very Strong influence relative to other factors

When you have completed the two questions, please return the materials to envelope #2.

Thank you for participating.

APPENDIX B

Research Instrument

Demographic

1) What is your gender? _____Male _____Female

2) What is your age? _____

3) What is your current job title?
   _____

4) How many college level business courses have you taken? _____

5) How many college level accounting courses have you taken? _____

Screen 2

(Deliberative Prime)

1) If an object travels at five feet per minute, then by your calculations how many feet will it travel in 360 seconds?
   Answer: _____

2) Suppose a student bought a pen and a pencil for a total of $11, and that the pen cost $10 more than the pencil. How much was the pencil?
   Answer: _____
3) If a consumer bought 30 books for $540, then on average how much did the consumer pay per book?
   Answer: _____

4) If a baker bought nine pounds of flour at $1.50 per pound then how much did the baker pay in total?
   Answer: _____

5) If a company bought 15 computers for $1200 each, then how much did the company pay in total?
   Answer: _____

(Intuitive Prime)

1) When you hear the name "Barack Obama," what do you feel? Please use one word to describe your predominant feeling.
   Answer: _____

2) When you hear the name "George W. Bush," what do you feel? Please use one word to describe your predominant feeling.
   Answer: _____

3) When you hear the name "Johnny Depp," what do you feel? Please use one word to describe your predominant feeling.
   Answer: _____

4) When you hear the words "9/11," what do you feel? Please use one word to describe your predominant feeling.
   Answer: _____

5) When you hear the word "baby," what do you feel? Please use one word to describe your predominant feeling.
   Answer: _____

Introduction

You are required to complete paperwork for your automobile insurance policy after the lease of your new car. The insurance paperwork provides guidelines for how to classify your lease based on the terms of your lease agreement.

Issue: Accounting for Leases

The insurance company requires that all vehicle leases to be classified as either **capital leases** or **operating leases**. For purposes of this study, there is **only one criterion** that you will need to consider in determining whether the lease should be classified as a capital lease or as an operating lease.

Criterion for Classifying Leases

- If at its inception, a lease meets the following criterion, it must be classified as a **capital lease** by the lessee:

  • ***The lease term is [equal to 75% or more][for the major part] of the estimated economic life of the leased property.***

    • **"Lease term"** is defined as the **fixed non-cancelable term of the lease plus all periods covered by bargain renewal options**.

    • **"Bargain renewal options"** allow the lessee to renew the lease for a **rental sufficiently lower than the fair rental of the property such that exercise of the option appears, at the inception of the lease, to be reasonably assured.**

- If at its inception, a lease does not meet the above criterion, it must be classified as an **operating lease**.

The Effects of Lease Type

- **Capital leases** are accounted for as if they are owned by the renter, including all the benefits and drawbacks of ownership. The policy amount will be based on the asset value of the vehicle.

- **Operating leases** are treated as a traditional lease. The policy amount will be based on the value of lease payments.

Equipment Lease Decision

You have entered into a vehicle lease agreement for a vehicle with an **estimated economic life of 6 years**. The lease has a **fixed non-cancelable term of 3 years**, with a lease payment of $395 payable at the beginning of each month.

At the end of the initial non-cancelable term, the lease agreement provides you with the **option to renew the lease for an additional 18 month period** with the monthly rental payment to be set at **90% of the fair rental value** for the equipment at that time.

If classified as a **capital lease**, the insurance company will treat the vehicle as if you own the vehicle **with a value of $28,440** at the inception of the lease.

If classified as an **operating lease**, the insurance company will base the policy on your **lease payments of $21,330**.

The annual premium for an insurance policy at your insurance company is approximately 3.5% of the vehicle's value. Thus, a capital lease will **result in a premium of $995** and an operating lease will **result in a premium of $746.**

Screen 4

Case Questions:
You have a decision to make regarding how to classify your vehicle lease for insurance purposes.

Based on the information presented on the preceding pages, circle a number on the scale below to indicate the likelihood that you would classify this lease as an operating lease or as a capital lease.

1	2	3	4	5	6	7	8	9	10
Definitely classify as an **Operating Lease**								Definitely Classify as a **Capital Lease**	

Screen 5

Debriefing Questions:

1) Based on information provided in this questionnaire, **what was the criterion you needed to consider in classifying a lease as a capital lease or an operating lease (check one)**?

_____ The lease term is **for the major part** of the estimated economic life of the leased property.

_____ The lease term is **equal to 75% or more** of the estimated economic life of the leased property.

2) Indicate the extent to which you agree with the following statement: "Classifying the equipment lease as an **operating lease** (rather than as a capital lease*) would improve my financial position."*

1	2	3	4	5	6	7
Strongly Disagree						*Strongly Agree*

3) If a criterion for classifying a lease as a capital lease is if the lease term is **for the major part** of the economic life of the asset, what is the minimum percentage you would assign to the expression "**for the major part**?"

(Please answer on a scale of 0% to 100%). _____ %

4) Indicate the extent to which you **felt evaluators would focus on your decision process** while making your classification decision.

1	2	3	4	5	6	7
Did Not Feel Like Evaluators Would Focus On My Process						Strongly Felt Like Evaluators Would Focus On My Process

5) Indicate the extent to which you **felt evaluators would focus on your decision outcome** while making your classification decision.

1 2 3 4 5 6 7

Did Not Feel Like Evaluators Would Focus On My Outcome

Strongly Felt Like Evaluators Would Focus On My Outcome

Screen 6

REI Index

Indicate the extent to which you agree with the following statements:

1) I trust my initial feelings about people.

1	2	3	4	5	6
Strongly					*Strongly*
Disagree					*Agree*

2) I believe in trusting my hunches.

1	2	3	4	5	6
Strongly					*Strongly*
Disagree					*Agree*

3) My initial impressions of people are almost always right.

1	2	3	4	5	6
Strongly					*Strongly*
Disagree					*Agree*

4) When it comes to trusting people, I can usually rely on my "gut feelings."

1	2	3	4	5	6
Strongly					*Strongly*
Disagree					*Agree*

5) I can usually feel when a person is right or wrong even if I can't explain how I know.

1	2	3	4	5	6
Strongly					*Strongly*
Disagree					*Agree*

Screen 7

Kahneman Puzzles

1) A bat and a ball cost $1.10 in total. The bat costs $1.00 more than the ball. How much does the ball cost?

_____ cents

2) If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets?

_____ minutes

3) In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake?

_____ days

APPENDIX C

Research Instrument

General Instructions

Thank you for your participation in this study. The purpose of the study is to examine the judgments accountants make about accounting rules. As you are aware, proper application of accounting rules is important for reliable financial reporting. Your participation should take approximately 15 minutes.

It is important that you work independently. Furthermore, since there may be others from your industry in this study at a later date please do not talk with your colleagues about the study after your participation. If you have any questions, please contact the lead researcher at <kdugas@bentley.edu>. Your participation in this study is voluntary and sincerely appreciated and by participating you consent to be included in the study.

Please answer the following questions about you

1) What is your gender? _____Male _____Female

2) How many accounting course have you completed?
_____

3) How many audit courses have you completed?
_____

4) Have you completed an audit internship?
_____

The following pages contain background information and relevant accounting guidance necessary to make your audit decision.

Background Information

Assume that you are the **auditor of ABC Company.** Your audit supervisor has assigned you to audit the classification of leases. ABC Company has entered into several leases for the year under audit.

Relevant Guidance: Accounting for Leases

Applicable accounting standards require leases to be classified and accounted for as either **capital leases** or **operating leases**. For purposes of this study, there is **only one criterion** that you will need to consider in determining whether a lease should be classified as a capital lease or as an operating lease.

Criterion for Classifying Leases

- If at its inception, a lease meets the following criterion, it must be classified as a capital lease by the lessee:

  • The lease term is (equal to 75% or more)[for the major part] of the estimated economic life of the leased property.

    • **"Lease term"** is defined as the fixed non-cancelable term of the lease plus all periods covered by bargain renewal options.

    • **"Bargain renewal options"** allow the lessee to renew the lease for a rental sufficiently lower than the fair rental of the property such that exercise of the option appears, at the inception of the lease, to be reasonably assured.

- If at its inception, a lease does not meet the above criterion, it must be classified as an operating lease.

The Financial Statement Effects of Leases

- Capital leases are accounted for by recording an **asset and a liability on the balance sheet** at the present value of the minimum lease payments. Lease payments are allocated between a reduction of the lease liability and **interest expense**. In addition, **depreciation expense** related to the leased asset is recognized over the lease term.

- Operating leases are accounted for as **rental expense** on the income statement. No asset or liability is recorded on the balance sheet.

Lease Decision: Delta Equipment Lease

ABC Company has entered into a lease for new equipment that has an **estimated economic life of 10 years**. The lease has a **fixed non-cancelable term of 5 years**, with a rental of $250,000 payable at the beginning of each month.

At the end of the initial non-cancelable term, the lease agreement provides ABC Company with the **option to renew the lease for an additional 3-year period** with the monthly rental payment to be set at **92% of the fair rental value** for the equipment at that time.

(ABC Company has classified the lease as a capital lease.)
[ABC Company has classified the lease as an operating lease.]
{Classification statement omitted}

If the appropriate classification of the lease is determined to be a **capital lease**, ABC Company should have recognized an **asset and a liability in the amount of $12,852,958** at the inception of the lease. In 2015, **interest expense and depreciation expense totaling $3,739,343** will be recognized.

If the appropriate classification of the lease is determined to be an **operating lease**, ABC Company should have recognized **rental expense of $3,000,000** in 2015 and no asset or liability.

Thus, determining that the appropriate classification of the lease is a capital lease will **increase 2015 liabilities by $12,852,958** and **increase 2015 expenses and decrease 2015 net income by $739,343** relative to ABC Company's financial position if the appropriate classification of the lease is an operating lease.

Delta Equipment Lease Classification Assessment

Based on the information presented above, circle a number on the scale below to indicate your perception of the appropriate classification of this lease as an operating lease or as a capital lease.

1	2	3	4	5	6	7	8	9	10
Definitely classify as an **Operating Lease**								Definitely Classify as a **Capital Lease**	

Lease Decision: Gamma Equipment Lease

ABC Company has entered into a lease for new equipment that has an **estimated economic life of 7 years**. The lease has a **fixed non-cancelable term of 4 years**, with $300,000 payable at the beginning of each month.

At the end of the initial non-cancelable term, the lease agreement provides ABC Company with the **option to renew the lease for an additional 1-year period** with the monthly rental payment to be set at **92% of the fair rental value** for the equipment at that time.

(ABC Company has classified the lease as a capital lease.)
[ABC Company has classified the lease as an operating lease.]
{Classification statement omitted}

If the appropriate classification of the lease is determined to be a **capital lease**, the Company will recognize an **asset and a liability in the amount of $12,711,961** at the inception of the lease. In 2015, **interest expense and depreciation expense totaling $4,312,720** will be recognized.

If the appropriate classification of the lease is determined to be an **operating lease**, the Company will recognize **rental expense of $3,600,000** in 2015 and no asset or liability.

Thus, determining that the appropriate classification of the lease is a capital lease will **increase liabilities by $12,711,961** and **increase 2015 expenses and decrease 2015 net income by $712,720** relative to ABC Company's financial position if the appropriate classification of the lease is an operating lease.

Gamma Equipment Lease Classification Assessment

Based on the information presented above, circle a number on the scale below to indicate your perception of the appropriate classification of this lease as an operating lease or as a capital lease.

1	2	3	4	5	6	7	8	9	10
Definitely classify as an **Operating Lease**								Definitely Classify as a **Capital Lease**	

Lease Decision: Sigma Equipment Lease

ABC Company has entered into a lease for new equipment that has an **estimated economic life of 10 years**. The lease has a **fixed non-cancelable term of 6 years**, with a rental of $200,000 payable at the beginning of each month.

At the end of the initial non-cancelable term, the lease agreement provides ABC Company with the **option to renew the lease for an additional 2-year period** with the monthly rental payment to be set at **92% of the fair rental value** for the equipment at that time.

(ABC Company has classified the lease as a capital lease.)
[ABC Company has classified the lease as an operating lease.]
{Classification statement omitted}

If the appropriate classification of the lease is determined to be a **capital lease**, ABC Company should have recognized an **asset and a liability in the amount of $11,982,395** at the inception of the lease. In 2015, **interest expense and depreciation expense totaling $3,100,772** will be recognized.

If the appropriate classification of the lease is determined to be an **operating lease**, ABC Company should have recognized **rental expense of $2,400,000** in 2015 and no asset or liability.

Thus, determining that the appropriate classification of the lease is a capital lease will **increase liabilities by $11,982,395** and **increase 2015 expenses and decrease 2015 net income by $700,772** relative to ABC Company's financial position if the appropriate classification of the lease is an operating lease.

Sigma Equipment Lease Classification Assessment

Based on the information presented above, circle a number on the scale below to indicate your perception of the appropriate classification of this lease as an operating lease or as a capital lease.

1	2	3	4	5	6	7	8	9	10
Definitely classify								Definitely Classify	

as an **Operating Lease** as a **Capital Lease**

Lease Decision: Phi Equipment Lease

ABC Company has entered into a lease for new equipment that has an **estimated economic life of 15 years**. The lease has a **fixed non-cancelable term of 9 years**, with a rental of $150,000 payable at the beginning of each month.

At the end of the initial non-cancelable term, the lease agreement provides ABC Company with the **option to renew the lease for an additional 2-year period** with the monthly rental payment to be set at **92% of the fair rental value** for the equipment at that time.

(ABC Company has classified the lease as a capital lease.)
[ABC Company has classified the lease as an operating lease.]
{Classification statement omitted}

If the appropriate classification of the lease is determined to be a **capital lease**, ABC Company should have recognized an **asset and a liability in the amount of $12,366,283** at the inception of the lease. In 2015, **interest expense and depreciation expense totaling $2,542,953** will be recognized.

If the appropriate classification of the lease is determined to be an **operating lease**, ABC Company should have recognized **rental expense of $1,800,000** in 2015 and no asset or liability.

Thus, determining that the appropriate classification of the lease is a capital lease will **increase liabilities by $12,366,283** and **increase 2015 expenses and decrease 2015 net income by $742,953** relative to ABC Company's financial position if the appropriate classification of the lease is an operating lease.

Phi Equipment Lease Classification Assessment

Based on the information presented above, circle a number on the scale below to indicate your perception of the appropriate classification of this lease as an operating lease or as a capital lease.

1	2	3	4	5	6	7	8	9	10
Definitely classify as an **Operating Lease**								Definitely Classify as a **Capital Lease**	

Questions

1) Based on information provided in this questionnaire, **what was the criterion you needed to consider in classifying a lease as a capital lease or an operating lease (check one)**?

_____ The lease term is **for the major part** of the estimated economic life of the leased property.

_____ The lease term is **equal to 75% or more** of the estimated economic life of the leased property.

2) Were you provided with management's classification of the leases?

_____ Yes, I was provided with management's classification of the leases.

_____ No, I was not provided with management's classification of the leases.

3) In your opinion, did ABC Company's option to renew the equipment lease at the end of its fixed non-cancelable term for 92% of the equipment's fair rental value represent a **bargain renewal option?** Circle the number that best represents your response

1	2	3	4	5	6	7
Not at all						*Definitely*

4) Indicate the extent to which you agree with the following statement: "Classifying the equipment lease as an **operating lease** (rather than as a capital lease*) would improve the financial position and results of operations reflected in ABC Company's financial statements."*

1	2	3	4	5	6	7
Strongly Disagree						*Strongly Agree*

5) Indicate the extent to which you agree with the following statement: "*ABC Company has an incentive to improve the financial position and results of operations reflected in ABC Company's financial statements."*

1	2	3	4	5	6	7
Strongly Disagree						*Strongly Agree*

6) Indicate the extent to which you agree with the following statement: "*ABC Company's own classification of the lease provides valuable information to the auditor"*

1	2	3	4	5	6	7
Strongly Disagree						*Strongly Agree*

7) Indicate the extent to which you agree with the following statement: "*I have discretion in deciding how much to weight various facts in reaching a decision"*

1	2	3	4	5	6	7
Strongly Disagree						*Strongly Agree*

8) Indicate the extent to which you agree with the following statement: "*An auditor will have to defend his/her application of this accounting standard to others."*

1	2	3	4	5	6	7
Strongly Disagree						*Strongly Agree*

9) If a criterion for classifying a lease as a capital lease is if the lease term is **for the major part** of the economic life of the asset, what is the minimum percentage you would assign to the expression "**for the major part**?"

(Please answer on a scale of 0% to 100%). _____ %

10) Please indicate the system of financial accounting standards with which you are most familiar

_____ U.S. Generally Accepted Accounting Principles (GAAP)

_____ International Financial Reporting Standards (IFRS)

_____ Local Reporting Standards

Please identify which standard system: _____

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