Accounting Regulations and Its Impact on the Judgments of Japanese Professional Accountants

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Abstract

The move towards a principles-based approach in accounting standards has been motivated by cases of accounting fraud and the global convergence of financial reporting. We examine whether a principles-based accounting standard with rules and guidance improves the judgments of accountants and more clearly conveys the economic substance of transactions and events. In particular, we extend prior research on accounting judgments by examining the effects of a principles-with-guidance approach and a principles-only approach, as well as the stringency and incentives on the judgments of Japanese accountants in a lease accounting setting. The results showed that “principle” (full payout criterion) had a positive effect, while “rule” (approximately 90% criterion) had a negative effect on encouraging Japanese professional accountants to recognize lease transactions. A more stringent numerical rule (approximately 88% criterion) had a positive effect only when clients were in poor financial conditions or high debt-equity ratio environments. The findings also indicated that Japanese accountants’ judgments were strongly subject to the perceived judgments of their colleagues, but the perception bias between accountants and their colleagues was not significant. This pioneering study contributes to a better understanding of the unique features of Japanese professional accountants’ judgments.

Keywords: Principles-with-guidance approach, principles-only approach, accounting standards, stringency, incentives, judgments
1. Introduction

We examine whether a principles-based accounting standard with rules and guidance (hereafter, “a principles-with-guidance approach”) improves the judgments of accountants and more clearly conveys the economic substance of transactions and events. The move towards a principles-based approach in accounting standards has been motivated by cases of accounting fraud and the global convergence of financial reporting. For instance, the Enron Corporation abused rules-based accounting standards, and many specific purpose companies (SPC) of the Enron group were not recognized on the consolidated balance sheet (Benston et al., 2006). The Enron scandal in 2001 called for the development of principles-based accounting standards in the United States (U.S.). The International Accounting Standards Board (IASB) pursued a strong initiative to implement global convergence of financial reporting with a principles-based approach, especially after 2005, when International Financial Reporting Standards (IFRS) were adopted in the European Union (EU) (Tweedie, 2007).

Prominent U.S. accounting regulators such as the Financial Accounting Standards Board (FASB) (2002), American Accounting Association (AAA) (2003) and Securities and Exchange Commission (SEC) (2003) initially affirmed the shift towards a principles-based approach, because this approach is easier to implement and more clearly conveys the “economic substance” of transactions and events. However, these regulators ultimately refused the application of a principles-only approach and suggested that rules and guidance as well as principles should be included in accounting standards. These facts motivated an examination of whether the incremental effect on the judgments of professional accountants exists when principles-based accounting standards include rules and guidance. We conduct our study in Japan because it includes a principles-with-guidance approach in a number of its accounting standards, which are predominately based on IFRS and U.S. GAAP.

Significant reforms of the Japanese accounting system were initiated in 1997 to address severe economic crises and dysfunction of the accounting system in the 1990s. The goal of these reforms was to establish free, fair, and global financial markets by accelerating large-scale deregulation and liberalization (Economic Council, 1996). To achieve this goal, future-oriented measurement bases such as fair value and present value were adopted in newly
established pronouncements, such as accounting standards for financial instruments, impairments, mergers and acquisitions, and pensions. Since these reforms, a substance-over-form approach has been considered to be important, and both managers and auditors have been required to make substantial judgments. For example, the auditing standard emphasized the need to exercise judgments as follows:

To judge the appropriateness of financial statements, auditors should make substantial judgments. Auditors should judge whether the accounting policy and method adopted by managers reflect the substance of transactions appropriately, and evaluate whether users of financial statements can understand the financial statements properly. (Business Accounting Council (BAC), 2002, par. 9 (1))

With regard to accounting for leases, managers and auditors should make substantial judgments in calculating the present value of lease assets and liabilities and in classifying a lease transaction into finance lease or operating lease categories (JICPA, 2002). However, even after these reforms in the 1990s and early 2000s, a more rules-based approach has been preferred in Japan to a more principles-based approach. In a lease accounting setting, auditors had not been required to make substantial judgments until a new standard was issued in 2007, because the pre-revised Accounting Standard for Lease Transactions (BAC, 1993) allowed lessees to not recognize finance lease transactions that do not transfer ownership on their balance sheet. This exceptional rule was allowed to mitigate economic consequences of the on-balance sheet effects of lease transactions—almost all Japanese companies applied this exceptional rule (Chinone, 1998). However, if International Accounting Standard (IAS) 17: Leases (IASB, 2008) had been applied in Japan, Japanese accountants would have been required to exercise substantial judgments.

It was when Statement No.13: Accounting Standard for Lease Transactions (ASBJ, 2007, hereafter, “ASBJ 13”)¹ was issued in Japan that managers and auditors were obliged to exercise substantial judgments. As shown in Table 1, ASBJ 13 applies a principles-with-guidance approach, which includes both principles and rules. Lease transactions are classified into either finance lease or operating lease transactions by using criteria such as “approximately 75 percent” as a useful economic life criterion and “approximately 90 percent” as a present value criterion. Concrete numerical expressions include “75 percent” and “90 percent,” which do not require substantial judgments, while accountants should exercise
judgments regarding the range of the term “approximately.” In contrast to ASBJ 13, IAS 17 represents a principles-only regime, which relies on imprecise uncertainty expressions such as “major part” as a useful economic life criterion and “substantially all” as a present value criterion, without referring to the numerical expressions such as 75 percent and 90 percent.

To move towards accounting convergence, the optional adoption of IFRS commenced in Japan in March 2010 for the consolidated financial statements of listed companies. Although only five companies to date have applied IFRS, Japanese-listed companies can select either Japanese generally accepted accounting principles (GAAP) or IFRS. Because significant differences in the judgments of professional accountants hinder the consistent interpretation and application of accounting standards within and across countries (Doupnik & Richter, 2003; Doupnik & Riccio, 2006; Tsakumis, 2007), it is useful to investigate how Japanese accounting professionals make judgments based on different accounting standards, different levels of stringency of numerical thresholds, and different incentives of managers and auditors. We extend prior research on accounting judgments by adopting a more holistic approach and developing six hypotheses to test various effects of a principles-with-guidance approach and a principles-only approach on the judgments of Japanese accountants via a questionnaire survey in a lease accounting setting.

The first hypothesis examines whether the incremental effect on the judgments of Japanese accountants exists when a principles-only accounting standard (IAS 17) include relatively more elaborate rules and guidance, such as approximately 90 percent as a present value criterion. In particular, it posits that judgments on recognition of lease transactions made under a principles-with-guidance standard (ASBJ 13), which includes elaborate rules, will reduce the aggressiveness of judgments of Japanese accountants compared to those made under a principles-only standard (IAS 17).

The second hypothesis investigates the stringency effect under a principles-with-guidance standard. The research concerning the impact of stringency of accounting standards on judgments is important, because probability thresholds indicate the level of flexibility provided to managers and auditors. To examine the effect of stringency in a lease accounting
setting, a present value criterion is manipulated between approximately 90 percent and approximately 88 percent. The second hypothesis presumes that Japanese accountants’ recognition of lease transactions are affected by the stringency of the standard, which is measured by the probability thresholds that are present. The next four hypotheses (H3-6) examine how the judgments of accountants may be affected by factors like incentives and perception bias. Given that there is a significant cultural difference between Japanese and Western professional accountants, it is useful to investigate the impacts of these factors to reveal the true attitudes and behaviors of Japanese accounting professionals.

The results of this study will provide important insights because Japan is a unique and economically important country. The inability of Japanese accountants to apply IFRS in the same manner as Western counterparts as a result of differences in culture and judgmental skills could have serious implications for international comparability of financial reporting.

The remainder of the paper is organized as follows. The second section provides the background to this study. The third section discusses the relevant theory and formulates the research hypotheses. The fourth section outlines the research methods. The fifth section presents the results and discussion. The final section provides the conclusion and implications of this study.

2. Background

After the Enron Corporation scandal, which abused a rules-based approach, a principles-based approach was promoted by accounting standards-setting bodies, such as the IASB and the FASB. However, consensus on the definitions of these approaches has not been reached worldwide. Nelson (2003, 91) defined principles-based accounting standards as those that are based on a conceptual framework, as follows:

Because U.S. accounting standards typically are written to operationalize the Financial Accounting Standards Board (FASB)’s underlying conceptual framework, they are based on principles. The standards also provide guidance as to correct accounting or disclosure treatment, so they include rules.

Schipper (2003, 62-63) supported Nelson’s (2003) definition and stated that:
U.S. generally accepted accounting principles (GAAP) is based on a recognizable set of principles derived from the FASB’s Conceptual Framework, but nonetheless contains elements that cause some commentators to conclude that U.S. accounting is “rules-based.” …U.S. GAAP is aimed at providing comparable, relevant, and reliable financial reporting, it is principles-based.

Although the FASB were designed to create a more principles-based approach, rules and guidance have not been excluded in the standard setting processes in the U.S. The term “rules” refers to specific criteria, bright-line thresholds, examples, scope restrictions, exceptions, subsequent precedents, and implementation guidance (Nelson, 2003). These exceptions and guidance are the result of having to fulfill the objectives of comparability and verifiability and are therefore deeply imbedded in accounting practices (FASB, 2002, 2-3). In addition, the litigious situation in the U.S. gives accountants a strong incentive to ask for rules and guidance they can adhere to in the case of a costly law suit (Benston et al., 2006).

The U.S. SEC also pledged its support for a more principles-based approach based on the fact that a mass of detailed rules and guidance in accounting standards have been encouraged in financial engineering to meet the letter of GAAP (SEC, 2003). To consistently interpret and apply accounting standards, it is crucial to understand the rationale behind the principles in particular standards (Picker et al., 2009, xiv). Additionally, exceptions and bright-line specifications provide the opportunity to structure transactions and shift preparers’ attention away from the intent of accounting standards. This result in financial reporting that is not representationally faithful to the underlying economic substance of transactions and events (SEC, 2003). However, the SEC (2003) rejected the application of a principles-only accounting standard, because it would provide insufficient guidance to frame the judgments of preparers and auditors and would lead to a significant loss of comparability among reporting entities. AAA (2003) also rejected the exclusion of rules and guidance from accounting standards and asked for supplementary descriptions, implementation guidance, and examples.

Conversely, Tweedie (2007) and other opponents of a principles-with-guidance approach often insist on using a principles-only approach, which is accompanied by a true-and-fair override. This approach supports the extensive application of professional judgments and
largely excludes rules and guidance. The approach is designed to increase accountants’ power over their clients, who can no longer claim that their accountants must attest that the company’s financial statements are fair, because they conform to the letter of GAAP (Benston et al., 2006; Alexander, 2007; Tweedie, 2007).

Both bright-line thresholds and imprecise expressions have strengths and weaknesses. Bright-line thresholds can be used in some circumstances to facilitate the accurate, shared understanding of the meaning of financial reports. However, greater reliance on rules can lead to the manipulation of financial reporting by structuring transactions that satisfy the letter, but not the spirit and intent, of the accounting standards (Nelson et al., 2002; SEC, 2003; Nobes, 2005; Frecka, 2008). In other words, precise standards can offer safe harbors via transaction structuring and therefore reduce regulators’ ability to constrain aggressive reporting. In contrast, imprecise expressions make it possible to return both the opportunity and responsibility to use professional judgments to accountants. However, it is also suggested that the use of a principles-only approach leads to low consensus among preparers and potential lack of comparability between financial reports (Nelson, 2003).

Compared to the studies conducted in Anglo-American countries (e.g., Psaros & Trotman, 2004; Psaros, 2007; Agoglia et al., 2011; Patel & Millanta, 2011), only a few studies (Koga et al., 2010; Machida, 2010) have been undertaken to investigate the judgment process of Japanese professional accountants who were accustomed to rules and guidance. In this sense, this study using Japanese accountants successfully extends prior research on accounting judgments by examining the effects of a principles-with-guidance approach and a principles-only approach, as well as stringency and incentives, on the judgments of accountants.

3. Theory and hypotheses

3.1. Effectiveness of principles-with-guidance standards (H1)

Accounting for leases is an appropriate context for judgment related studies (Jamal & Tan, 2010; Agoglia, et al., 2011). In the case of the U.S., the Financial Accounting Standards (FAS) 13: Accounting for Leases (FASB, 1976) requires capitalization when any one of the following four technical tests is satisfied. First, a lease transaction transfers ownership of the
property to the lessee by the end of the lease term. Second, a lease transaction contains a bargain purchase option. Third, the length of the lease transaction equals or exceeds 75 percent of the useful life of the asset. Finally, the present value of the lease payments equals or exceeds 90 percent of the fair value of the asset. These four technical tests are based on bright-line thresholds and do not require professional judgments by accountants. A rules-based approach includes several advantages such as clarity, understandability, and verifiability. However, the bright-line criteria used by FAS 13 have been blamed for allowing and even encouraging opportunistic managers to structure transactions to produce misleading financial statements. Indeed, because of the compliance of numerical criteria such as 75 percent and 90 percent, professional accountants would have to attest that financial reporting presents the financial condition of the corporation fairly in accordance with U.S. GAAP. With respect to the Enron Corporation in particular, the audit firm Arthur Andersen was charged with designing financial instruments that met the technical requirements of U.S. GAAP while violating the spirit and intent of accounting standards (Benston et al., 2006, 46). It is particularly difficult to resist such pressure when indicative rules that do not require professional judgments by accountants are provided.

In contrast, IAS 17 requires that a lease be capitalized as an asset and a liability when it satisfies the full payout criterion and transfers substantially all the risks and rewards to the lessee. In distinguishing finance lease and operating lease transactions, IAS 17 uses probability criteria such as “major part” as a useful economic life criterion and “substantially all” as a present value criterion. In other words, IAS 17 contains no numerical or other technical rules surrounding that vague principle. However, one concern about the use of a principles-only approach is that preparers may interpret imprecise expressions differently, leading to low consensus among preparers and a potential lack of comparability between financial reports (Nelson, 2003). Eventually, under principles-only accounting standards such as IAS 17, accountants might account for the same leases differently, depending on how they interpret uncertainty expressions such as “major part” and “substantially all” (Benston et al., 2006, 46).

Psaros and Trotman (2004) showed that the imprecision of principles-based standards seems to be more effective in supporting unbiased financial reporting than rules-based standards. Furthermore, Nelson et al. (2002) provided evidence that income-increasing earnings
management is more likely when transactions have been structured and/or standards are precise. In this sense, ASBJ 13, which adopts a principles-with-guidance approach, may include strengths of both principles-based and rules-based standards. As with IAS 17, ASBJ 13 applies imprecise principles including a full payout criterion. It also uses more elaborate numerical criteria, such as approximately 75 percent and 90 percent.

By adopting the full payout (substantially all of the risks and rewards) criterion, both IFRS (IAS 17) and Japanese GAAP (ASBJ 13) reflect the substance of a lease transaction in classifying it into finance lease and operating lease categories (see Table 1). The main difference between these standards is whether substance is supplemented either by numerical expressions such as 75 percent and 90 percent, or by a true-and-fair override. Both concrete rules and imprecise expressions have merits and drawbacks in the consistent interpretation and application of accounting standards (e.g., Nelson, 2003; Psaros & Trotman, 2004). We examine whether the incremental effect on the judgments of Japanese accountants exists when a principles-only accounting standard (IAS 17) include relatively more elaborate rules and guidance, such as approximately 90 percent as a present value criterion. The following hypothesis is formulated:

H1: Judgments on the recognition of lease transactions made under a principles-with-guidance standard (ASBJ 13), which includes elaborate rules, will reduce the aggressiveness of judgments of Japanese accountants compared to those made under a principles-only standard (IAS 17).

3.2. Effects of stringency (H2)

According to Hofstede (1984, 2001) and Gray (1988), the Japanese accounting value has been ranked as high conservatism with low professionalism, which implies low preference for the exercise of professional judgment while exhibiting high compliance with prescriptive legal requirements and rules. Other relevant studies including Nobes (1992), Nobes and Parker (2008) and Doupnik and Perera (2012) suggest that the Japanese accounting system is grouped into the Continental-European model with France and Germany, which is characterized by debt orientation, code law, interdependence of accounting and tax schemes, and a weak accounting profession. Consequently, the Japanese accounting system contrasts with the Anglo-American model, which has developed over a long period of time in an
environment mostly characterized by investor orientation, common law, separation of accounting and tax schemes, and extensive application of professional judgments. These classifications may indicate that a principles-only approach, which is preferred in the Anglo-American model, does not necessarily suit Japanese professional accountants when they interpret and apply this approach.

Previous studies conducted in Anglo-American countries have shown that precise standards are less effective in constraining aggressive reporting. For example, Cuccia et al. (1995) selected 138 professional tax preparers in the U.S. as subjects and provided evidence that they responded to a more stringent tax practice standard by interpreting evidence more liberally. They concluded that decisions made under a more stringent standard were as aggressive as decisions made under a less stringent standard. Similarly, in the consolidated financial statements setting, the level of stringency of the standard did not affect the consolidation judgments of Australian accountants (Psaros & Trotman, 2004). However, unlike Anglo-American countries such as the UK and Australia, concrete criteria have been preferred in Japan (Koga et al., 2010; Machida, 2010). Thus, it is important to investigate whether the stringency included in numerical expressions has an impact on the judgments of Japanese professional accountants in the same way as accountants who have focused on and applied extensive professional judgments.

Very limited research has been carried out on the effect of stringency of accounting standards on the judgments of professional accountants, though considerable research has been undertaken on the effectiveness of rules-based and principles-based approaches (e.g., Gibbins & Mason, 1988; FASB, 2002; SEC, 2003; AAA, 2003; Nelson, 2003; Schipper, 2003; ICAS, 2006; Tweedie, 2007). Some studies have raised the important question of whether replacing a standard that contains vague expressions with a standard that employs more stringent numerical thresholds mitigates aggressive reporting. Cuccia et al. (1995) concluded that decisions made under a more stringent standard were as aggressive as decisions made under a less stringent standard. This was because, even under the more stringent standard, professional tax practitioners could make aggressive reporting decisions by shifting their assessment of evidential support. Psaros and Trotman (2004) also provided evidence that, in the consolidated financial statements setting, increasing the stringency of the standard did not affect consolidation judgments.
There is a lack of evidence on whether observations tested in Anglo-American countries are equally applicable to the behavior of Japanese accountants. As already indicated, to examine the effect of stringency in a lease accounting setting, a present value criterion is manipulated between approximately 90 percent and approximately 88 percent. It is considered that an 88-percent threshold is more stringent than a 90-percent threshold, because if accountants prefer not to recognize these lease transactions on their balance sheet, they may regard an 88-percent threshold as being more stringent than a 90-percent threshold. To investigate the stringency effect under a principles-with-guidance standard, the following hypothesis is tested:

H2: Japanese accountants’ recognition of lease transactions are affected by the stringency of the standard which is measured by the probability thresholds that are present.

3.3. Effects of incentives (H3-H6)

In addition to the stringency of accounting standards, judgments may be affected by the incentives of managers and auditors. Incentive-consistent reporting choices by corporate managers can be justified either via transaction structuring in the case of precise standards or via the aggressive interpretation of standards in the case of imprecise standards (Nelson, 2003). Although auditors are expected to reduce aggressive reporting by managers, some studies have found that auditors are more likely to allow their clients to take aggressive positions when uncertainty (ambiguity) in accounting standards increases (Nelson & Kinney, 1997) and precedents offer more room for interpretation because of the lack of authoritative guidance (Salterio & Koonce, 1997). Other studies have argued that auditors are more likely to justify aggressive reporting when the auditors’ engagement or litigation risk is low (Hackenbrack & Nelson, 1996) and when auditors can diffuse their responsibilities by consulting other experts within the firm (Kennedy et al., 1997).

Of concern here is that auditors are not independent of managers because of the unconscious effect of managers’ incentives to present the company’s financial position in the best possible light and because of incentives to maintain good auditor-client relationships (Bazerman et al., 1997). Knapp (1985) surveyed the issue concerning auditor-client conflicts and indicated that a client in good financial condition (e.g., a profit group) is more likely to obtain its preferred
result from an audit conflict than a client in poor financial condition (e.g., a loss group). Psaros and Trotman (2004) also showed that accountants who had incentives to not recommend consolidation (a loss group) were less likely to recommend consolidation than accountants who had incentives to recommend consolidation (a profit group). With regard to a lease accounting setting, Fülbier et al. (2008) and Duke et al. (2009) suggested that a company in which a debt-equity ratio is high and/or return on assets is low, or more specifically, a company that has financial covenants and/or executive compensation plans, is less likely to recognize lease transactions. Substantially, it is argued that, regardless of the types of accounting regulations, managers and auditors tend to use the flexibility inherent in accounting rules to conduct financial reporting that is favored by their incentives.

It is also important to note that group thinking (collectivism) and prudent and conservative virtues (conservatism) have been respected in Japan because of the influence of Confucian teaching, in contrast to the individualism and optimism observed largely in Anglo-American countries (Gray, 1988; Hofstede & Bond, 1988; Hofstede, 2001; Suzuki, 2011). Patel and Millanta (2011) suggested that individualism and fierce competition among Western accountants were likely to lead to the development of “holier-than-thou” perception bias, which they defined as the tendency of individuals to perceive their colleagues as behaving less ethically than themselves in morally challenging situations. Conversely, the influence of Confucianism, collectivism, and conservatism may lead Japanese professional accountants to perceive themselves as acting in a similar manner to their colleagues and may therefore mitigate the effect of incentives compared to Western accountants who tend to maximize opportunities (individual profit) through competition. Given these cultural differences, a perception bias is expected to be stronger for Western professional accountants than for Japanese accountants. This perception bias can be measured by the difference between accountants’ own judgment and their colleagues’ perceived judgment. To examine the perception bias and incentive effect, the following two hypotheses are formulated:

H3: Japanese accountants are likely to make their judgments in a manner similar to those of their colleagues; therefore, there is no significant perception bias between themselves and their colleagues.

H4: Judgments of Japanese accountants who have incentives to not recommend the
recognition of lease transactions due to a client’s high debt-equity ratio are not significantly different from judgments made by accountants who do not have incentives to not recommend recognition due to a client’s low debt-equity ratio.

Psaros and Trotman (2004) further investigated the difference in judgments between principles-based and rules-based standards. They showed that, under a principles-based standard, the incentives of Australian accountants to not recognize loss-making entities in consolidated financial reporting were more restricted than incentives under a rules-based standard. Importantly, even if a principles-only approach (IAS 17) is preferred in the Anglo-American model to mitigate the incentive effect, Japanese accountants do not necessarily interpret and apply this principles-only accounting standard consistently. Compared to this prior study using Australian participants, it was found that Japanese accountants had been accustomed to a more rules-based approach (Koga et al., 2010; Machida, 2010). Therefore, it is important to investigate the interactive effects of an incentive to not recognize lease transactions under different types of regulations, namely a principles-with-guidance approach (ASBJ 13) versus a principles-only approach (IAS 17). Accordingly, the following two hypotheses are formulated:

H5: With regard to a high debt-equity ratio environment, the judgments of Japanese accountants on the recognition of lease transactions made under a principles-with-guidance standard (ASBJ 13) will reduce aggressive reporting compared to those made under a principles-only standard (IAS 17).

H6: With regard to a low debt-equity ratio environment, the judgments of Japanese accountants on the recognition of lease transactions made under a principles-with-guidance standard (ASBJ 13) will reduce aggressive reporting compared to those made under a principles-only standard (IAS 17).

4. Research method

4.1. Data collection

The data was collected via a questionnaire-based survey among Japanese Certified Public
Accountants (CPAs) who were working at large accounting firms in Japan. Three large accounting firms in Japan agreed to allow their accountants to participate in the survey. A total of 207 accountants were sent an email requesting their participation in the questionnaire survey (99 accountants received Scenario 1 and 108 accountants received Scenario 2). Subjects were also sent a direct link to the survey through SurveyMonkey (www.surveymonkey.com).

A total of 114 responses were initially collected, but two were excluded from the data because the responses were incomplete. As a result, the effective response was 112 (54.1% response rate).

4.2. Questionnaire Development

The questionnaire administered in this research contained two sections. In the first section, participants were asked to answer several questions regarding the recognition of a lease transaction and controversies surrounding the effectiveness of a principles-with-guidance approach versus a principles-only approach.

The two scenarios on the recognition of lease assets and liabilities were developed by the authors to pose a problem regarding appropriate financial reporting. In each scenario, a client entered into a non-cancellable lease for a major item of plant. The present value of the minimum lease payments, including lease payments and guaranteed residual value, was estimated at 85 percent of the fair value of the asset at the date of inception of the lease. An extract of a conversation between two professional accountants was provided for participants, in which one accountant stated that a lease transaction should be recognized on the balance sheet, and the second accountant was of the view that a lease transaction did not have to be recognized on the balance sheet. The former accountant insisted on the recognition of the lease transaction because “risks and rewards of ownership would normally be expected to pass to the lessee in situations in which the present value of the minimum lease payment amounts to at least substantially all of the fair value of the leased asset.” Additionally, it would be impossible for the client to achieve business aims and activities without this leased asset. In contrast, the latter accountant disagreed with the recognition, because 85 percent would not be considered to represent “substantially all” of the fair value of the leased asset. In making judgments, participants were allowed to use preferable criteria such as substantially
all of the risks and rewards ("full payout") and numerical expressions ("approximately 90%" and "approximately 88").

The scenarios were manipulated to measure the effect of incentives. The first scenario (Scenario 1) created a critical situation with a high debt-equity ratio of a client so that accountants had incentives to not recommend the recognition of lease transactions. In contrast, the second scenario (Scenario 2) assumed a low debt-equity ratio so that accountants could make their decisions without considering the client’s financial situation. Firstly, respondents were asked to what degree they agreed, from an accountant’s viewpoint, that the lease transaction should have been recognized on the client’s balance sheet. They were then asked whether they used three criteria, namely “full payout,” “approximately 90%,” and “approximately 88%” in making their judgment and to what extent they considered these criteria. Finally, they were asked whether their colleagues agreed with the accountant’s view that the lease transaction should have been recognized on the lessee’s balance sheet. A seven-point Likert scale was used to measure subjects’ responses for all questions in these scenarios, which were anchored as one for strongly disagree (or not important) and seven for strongly agree (or extremely important).

In the second section, the questionnaire sought background information on participants such as their age (AGE), gender (GENDER), membership of professional accounting body (JICPA), job experience as a CPA (JOBEXP), and the major field of their job (FIELD).

Pilot tests were conducted among postgraduate accounting students and professional accountants who did not participate in this study to validate the reliability of the scenarios. After receiving their comments, a number of revisions were made to finalize the questionnaire used for our substantial survey.

Table 2 shows the demographics of the participants in this study. According to Table 2, the average age of participants was 33.57, and the frequency of this statistic was normally distributed. The age for the majority of participants was early 30s. This statistic might be related to the length of their job experience as an accountant, which was around five years, because most of the participants started their careers in their late 20s after passing the CPA exam. Both the mode and the median for JOBEXP were commonly five. In terms of gender,
the percentage of females was 16.1%. In the 2011 CPA exam, the number of successful female examinees was 308 (21.2%) (Financial Service Agency: http://www.fsa.go.jp/cpaaob/shinsakai/pamphlet/shiken-pamph.pdf) and the number of successful male examinees was 1,139 (78.8%), thus this gender proportion among our participants was considered to be relatively representative of the entire population of Japanese CPAs. The JICPA score reported the incidence of participant membership of the professional accounting body in Japan (JICPA). In this study, professional accountants who were fully qualified and certified as CPAs were classified as affiliates, while those who had passed the CPA exam but needed to complete more training and gain experience were classified as associate affiliates. In Table 2, the majority of participants were accountants in an affiliate position (75.0%), which indicated that they had enough experience to deal with critical judgments regarding the accounting transactions at issue. Others categories were for respondents who were certified or chartered by overseas professional accounting bodies, such as the American Institute of Certified Public Accountants (AICPA). With regard to the FIELD, one participant worked in the field of taxation, while the other 111 participants dealt with auditing practices.

<Insert Table 2 about here>

4.3 Analysis Techniques
This study applied the following multiple regression to address all the hypotheses developed in this study. Using this regression analysis, the associations of five specific factors were statistically investigated in relation to the judgments of participating accountants’ for recognition of the lease transaction (YOREC). These five specific factors were the participants’ perceived agreements for principles (FULPO), rules and guidance (APOX90), more stringent numerical thresholds (APOX88), differences in scenarios with high/low debt-equity ratio (INCTV), and perceived judgment on the recognition of the lease transaction among colleagues (COREC). This analysis was conducted primarily to address H1, H2, H3, and H4.

\[ \text{YOREC} = \alpha + \beta_1 \text{FULPO} + \beta_2 \text{APOX90} + \beta_3 \text{APOX88} + \beta_4 \text{INCTV} + \beta_5 \text{COREC} + \epsilon \]
In this regression model, the five factors, FULPO, APOX90, APOX88, INCTV, and COREC, were all incorporated as independent variables, while YOREC was used as the dependent variable. Additionally, this study applied a t-test to compare differences in the holier-than-thou perception bias between participating accountants and their colleagues, which helped to address H3 in particular.

Finally, H5 and H6 were investigated using the following two regression analysis models.

\[
\begin{align*}
\text{YOREC}^{\text{high}} &= \alpha + \beta_1 \text{FULPO}^{\text{high}} + \beta_2 \text{APOX90}^{\text{high}} + \beta_3 \text{APOX88}^{\text{high}} \\
&\quad + \beta_4 \text{COREC}^{\text{high}} + \epsilon \\
\text{YOREC}^{\text{low}} &= \alpha + \beta_1 \text{FULPO}^{\text{low}} + \beta_2 \text{APOX90}^{\text{low}} + \beta_3 \text{APOX88}^{\text{low}} \\
&\quad + \beta_4 \text{COREC}^{\text{low}} + \epsilon
\end{align*}
\]

Four independent variables and one dependent variable were divided into two groups in relation to two different scenarios in which participants made their judgments for the recognition of a lease asset in either a high or low debt-equity ratio environment. The small terms of “high” and “low” of each attribute were allotted to represent which groups of data were analyzed. The four factors FULPO, APOX90, APOX88, and COREC were incorporated as independent variables in the two separate analysis models depending on the scenarios with a high or low debt-equity ratio, respectively. The two dependent variables were \( \text{YOREC}^{\text{high}} \) and \( \text{YOREC}^{\text{low}} \).

5. Results and Discussion

\( H1, H2 \) and \( H3 \)

Table 3 provides the results of the regression analysis for YOREC. The findings include an F-value of 50.769 (\( p < .01 \)) and an adjusted R Square of .692. These statistics indicate that a sufficient relationship exists within this analysis model. The FULPO, APOX88, and COREC have a significant and positive relationship with the dependent variable of YOREC (\( t = 2.451, p < .05 \) for FULPO; \( t = 2.646, p < .01 \) for APOX88; \( t = 13.393, p < .01 \) for COREC). On the other hand, the APOX90 has a significant but negative relationship with YOREC (\( t = -3.727, p < .01 \)).
The analysis results of the multiple regressions for YOREC report significant associations of both FULPO and APOX90 with YOREC. The association of FULPO with YOREC is positive, while that of FULPO and APOX90 is negative. These results indicate that participating accountants who strongly considered a principles-only approach tended to recommend recognition of the lease transaction, while participants who strongly considered rules and guidance together with principles tended to not recommend recognition of the lease transaction. These findings imply that a principles-only approach of IASB’s IAS17 has the possible effect of encouraging practitioners to recognize a lease transaction over a principles-with-guidance approach under Japanese ASBJ 13. The interpretation of this study does not support suggestions by Nelson (2003) and Schipper (2003), which point out the effectiveness of elaborate rules and guidance in relation to reducing aggressive reports. From this result, the approximately 90% rule on ASBJ 13 may have been used as an excuse to avoid recognition of the lease transaction rather than justification to implement the appropriate treatment for recognition. This outcome shows that a principles-with-guidance approach is not necessarily more effective for Japanese accountants than a principles-only approach, and therefore H1 is rejected.

In contrast to the result of APOX90, our regression outcome exhibited a positive association of APOX88 with YOREC, which suggests that participants who strongly considered stringent 88% accounting standards tended to agree on the recognition of lease transactions, while those who gave less consideration to the stringent standards tended to disagree with recognizing this transaction on the balance sheet. This finding clearly addresses our H2 research hypothesis and supports the notion that judgments by Japanese accountants on the recognition of the lease transaction would be affected by the stringency of the standards measured by the probability thresholds presented. Compared with the reverse association of APOX90, the finding of APOX88 provides evidence that more stringent numerical expression under a principles-with-guidance approach effectively affects practitioners’ judgments and entices them to increase the recognition of lease transactions. This is in great contrast to the findings of Psaros and Trotman (2004) and Cuccia et al. (1995) which assert that the stringency of the standards does not affect individuals’ accounting judgments.
The result of the regression analysis also demonstrated a significant association between COREC and YOREC. This outcome means that participants who perceived that their colleagues would recommend the recognition of the lease transaction in the scenario tended to agree with the recognition of this transaction. Accordingly, it is confirmed that the perceived judgment of lease transaction among colleagues is the significant predictor for the judgment made by Japanese accountants. This finding indicates that our hypothesis H3, that Japanese professional accountants are likely to make judgments in a similar manner to their colleagues, is supported.

H4

Table 4 demonstrates the t-test results, which compares differences in the perception bias between participants’ judgments of YOREC and their colleagues’ perceived judgments of COREC. This bias was also calculated by using each of two scenarios (High or Low debt-equity ratio environment). The outcomes of these three t-tests were all shown as non-significant results.

<Insert Table 4 about here>

With regard to the difference in perception between accountants and colleagues, Patel and Millanta (2011) articulate that fierce competition among accountants in big four firms causes the development of the holier-than-thou perception bias, which leads accountants to perceive themselves as being more ethical than their colleagues. According to this theory, it is anticipated that the larger the scores of perception bias are, the more likely professional accountants are to view their colleagues as out-group members, while the smaller the scores of the perception bias are, the more likely they are to perceive their colleagues as in-group members. Given this construct in a previous study, the result of the present study in Table 6 reports that the perception bias between accountants and their colleagues is relatively smaller (.169 out of 7.00), which implies that Japanese professional accountants make more unbiased judgments than Western professional accountants regardless of whether the high incentive of non-recognition of lease transactions (e.g., due to a high debt-equity ratio environment) exists.

The INCTV was also incorporated into the regression model to address H4. According to these results, non-significant results in the association between INCTV and YOREC indicate
that different levels of incentives for practitioners for the recognition of lease transactions (either higher or lower debt-equity ratio) does not affect participants’ judgments regarding the recognition of lease transactions. Although a large number of previous studies (Knapp, 1985; Cuccia et al., 1995; Hackenbrack & Nelson, 1996; Bazerman et al., 1997; Libby et al., 2002; Nelson et al., 2002; Nelson, 2003; Psaros & Trotman, 2004; Psaros, 2007) predict the association between practitioners’ incentives and their judgments, this study with Japanese participants fails to find a significant relationship between two variables. Therefore, H4 of this study is rejected.

H5 and H6

Table 5 reports the results of the regression analysis for YOREC\textsuperscript{high}. This regression was conducted specifically to address H5. An F-value of 41.276 (p < .01) and an adjusted R Square of .760 were found. These statistics indicate a significant relationship within this analysis model. The APOX88\textsuperscript{high} and COREC\textsuperscript{high} have a significant and positive relationship with the dependent variable of YOREC\textsuperscript{high} (t = -2.7, p < .01 for APOX88\textsuperscript{high}, t = 10.917, p < .01 for COREC\textsuperscript{high}). On the other hand, the APOX90\textsuperscript{high} has a significant but negative relationship with YOREC\textsuperscript{high} (t = 2.7, p < .01).

This study also prepared an additional regression analysis for YOREC\textsuperscript{low} to address H6. The result of this analysis is exhibited in Table 6. The findings of this regression reveal an F-value of 25.464 (p < .01) and an adjusted R Square of .624, which represents a significant relationship within this analysis model. The COREC\textsuperscript{low} has a significant and positive relationship with the dependent variable of YOREC\textsuperscript{low} (t = 8.387, p < .01 for COREC\textsuperscript{low}). On the other hand, the APOX90\textsuperscript{low} has a significant but negative relationship with YOREC\textsuperscript{low} (t = -2.338, p < .05).

These results concerning H5 and H6 demonstrate no significant association of a principles-only approach but do indicate a strong significant association of the perceived judgment of colleagues in both regression models. Furthermore, the comparison between the
results of two regressions for $\text{YOREC}^{\text{high}}$ and $\text{YOREC}^{\text{low}}$ report that significant results of APOX88 appear only in the high-debt ratio environment ($\text{Scenario 1}$), and this variable did not have a significant association with $\text{YOREC}^{\text{low}}$ when our participants were in the low-debt ratio environment ($\text{Scenario 2}$). These results indicate that participants tend to take more stringent rules (APOX88) into consideration for their recognition judgments when their clients are likely to fall into critical situations. Unlike Cuccia et al. (1995), Nelson (2003), and Psaros and Trotman (2004), our findings indicate that principles (FULPO) are regarded to work as less effective criteria than more stringent rules (APOX88) when they are in a high debt-equity ratio environment ($\text{Scenario 1}$) and their clients are going bankrupt.

6. Concluding remarks

This study examines whether a principles-based accounting standard with rules and guidance improves the judgments of accountants. Contrary to our expectation, the results indicate that Japanese accountants who support a principles-with-guidance approach (ASBJ 13) more strongly than a principles-only approach (IAS 17) tend to avoid the recognition of lease transactions. In particular, principles (full payout) have a positive effect, while rules (approximately 90%) have a negative effect on encouraging Japanese professional accountants to recognize lease transactions. These outcomes do not support prior studies (FASB, 2002; AAA, 2003; Nelson, 2003; Schipper, 2003; SEC, 2003), which recommend the inclusion of rules and guidance as well as principles in accounting standards to fulfill the objectives of comparability and verifiability. These findings indicate that the approximately 90% criterion on ASBJ 13 may have been used as an excuse to avoid recognition of the lease transaction rather than as a justification for implementing appropriate treatment for recognition.

Nonetheless, this evidence does not necessarily suggest that numerical expressions are inferior to vague principles in any scenario. Consistent with the results of Cuccia et al. (1995), Nelson (2003), and Psaros and Trotman (2004), the stringency effect does not have a significant association with auditors’ judgment when their clients are in good financial condition or in the low-debt ratio environment ($\text{Scenario 2}$). On the other hand, contrary to prior studies, this study observes the interactive effect of stringency and incentives when clients are in poor financial condition. In these critical situations, more stringent numerical
expression under a principles-with-guidance approach effectively influences practitioners’ judgments and entices them to increase their recognition of lease transactions. This result clearly implies that more stringent rules and guidance (approximately 88%) are regarded as relatively stronger criteria than principles (full payout) when they are in a high-equity ratio environment (Scenario 1).

It is also important to mention that Japanese accountants’ judgments were influenced strongly by their colleagues’ judgments. Indeed, the results of this study show that the perception bias between accountants and their colleagues is relatively smaller and is not significant among participants. Contrary to the anticipation that fierce competition among accountants in big four firms causes the development of a holier-than-thou perception bias, Japanese professional accountants tend to make unbiased judgments regardless of incentives to not recognize lease transactions due to a high debt-equity ratio environment. These effects may be caused by the influence of the teachings of Confucius, group thinking (collectivism), and prudent and conservative virtues (conservatism) (see Gray, 1988; Hofstede & Bond, 1988; Hofstede, 2001; Suzuki, 2011).

Overall, the findings show that, to enhance the implementation of appropriate treatment for recognition, there is no other way but to choose a principles-only approach or principles-with-more-stringent-rules approach. Of concern here is the fact that principles had a positive effect within both poor and good environments (Scenarios 1 and 2), while more stringent expressions worked only for poor environments (Scenario 1). Given this fact, the adoption of more principles-based standards may be more effective than taking into consideration the more stringent rules in preparing accounting standards. This is consistent with our empirical result that a principles-only approach (IAS 17) is more effective for the judgments of Japanese professional accountants than a principles-with-guidance approach (ASBJ 13).

This study identifies a significant association between the judgments of Japanese professional accountants and the perceived judgments of their colleagues. This result may also alert us to the possibility that the implementation of more principles-based standards in Japan would result in a situation in which Japanese professional accountants preferred to use perceived judgment among colleagues as a tacit guideline when applying and interpreting
principles-based standards. Thus, to avoid a significant within-country difference in the judgments of professional accountants, the importance of consistent training and education on more principles-based standards should not be underestimated.

Some limitations in this research should be acknowledged. Firstly, this study successfully captured the significant judgmental features of Japanese professional accountants. However, the survey was conducted only in a lease accounting setting. For fair comparison with studies conducted in Anglo-American countries, and for generalization purposes, further studies should be conducted in Japan that apply other accounting standards, such as consolidated financial statements, and consider other cultural and ethical settings and scenarios. Secondly, although organizational culture in the Japanese big four accounting firms is changing as a result of cultural changes initiated by the conjunction of more than two cultural systems (acculturation), this study fails to find any statistical connection between perception bias and acculturation. These acculturative changes are likely to have a significant influence on professional accountants in Japanese big accounting firms because of their greater global interactions and the rush toward global convergence of financial reporting. Acculturation changes may facilitate IFRS adoption in Japan by providing a more Western outlook for Japanese professional accountants that enables them to accept more principles-based standards. Hence, an extension of this study which provides insights into the effects of acculturation and globalization on Japanese professional accountants is needed. Despite these limitations, this exploratory study is the first in a lease accounting setting in Japan that will contribute to a better understanding of the unique features of the judgments of Japanese accountants.
References


Table 1: Different Types of Regulations: ASBJ 13 versus IAS 17

<table>
<thead>
<tr>
<th>Standards</th>
<th>ASBJ 13 (ASBJ, 2007)</th>
<th>IAS 17 (IASB, 2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach</td>
<td>Principles-with guidance approach</td>
<td>Principles-only approach</td>
</tr>
<tr>
<td>Concept of substance-over-form</td>
<td>Full payout criterion applied (Transfers substantially all the risks and rewards)</td>
<td></td>
</tr>
<tr>
<td>Guidelines</td>
<td>More Precise Expressions</td>
<td>Imprecise Expressions</td>
</tr>
<tr>
<td></td>
<td>(a) ownership transfer terms</td>
<td>(a) major part</td>
</tr>
<tr>
<td></td>
<td>(b) right to purchase terms</td>
<td>(b) substantially all</td>
</tr>
<tr>
<td></td>
<td>(c) approximately 75%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(d) approximately 90%</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Demographics of Participants

<table>
<thead>
<tr>
<th></th>
<th>Frequency (n)</th>
<th>Missing (n)</th>
<th>Minimum (n)</th>
<th>Maximum (n)</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
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<td>3</td>
<td>22</td>
<td>52</td>
<td>33.57</td>
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<td>0</td>
<td>25</td>
<td>7.15</td>
<td>4.860</td>
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<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
<th>Valid Percent (%)</th>
<th>Cumulative Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>94</td>
<td>83.9</td>
<td>83.9</td>
<td>83.9</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>16.1</td>
<td>16.1</td>
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<tr>
<td>Total</td>
<td>112</td>
<td>100.0</td>
<td>100.0</td>
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<table>
<thead>
<tr>
<th>JICPA</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
<th>Valid Percent (%)</th>
<th>Cumulative Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affiliate</td>
<td>84</td>
<td>75.0</td>
<td>75.0</td>
<td>75.0</td>
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<tr>
<td>Associate Affiliate</td>
<td>26</td>
<td>23.2</td>
<td>23.2</td>
<td>98.2</td>
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<tr>
<td>Others</td>
<td>2</td>
<td>1.8</td>
<td>1.8</td>
<td>100.0</td>
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<tr>
<td>Total</td>
<td>112</td>
<td>100.0</td>
<td>100.0</td>
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<table>
<thead>
<tr>
<th>Field</th>
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<th>Percent (%)</th>
<th>Valid Percent (%)</th>
<th>Cumulative Percent (%)</th>
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<tbody>
<tr>
<td>Auditing</td>
<td>111</td>
<td>99.1</td>
<td>99.1</td>
<td>99.1</td>
</tr>
<tr>
<td>Taxation</td>
<td>1</td>
<td>.9</td>
<td>.9</td>
<td>100.0</td>
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<tr>
<td>Total</td>
<td>112</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 3: Multiple Regression Result for YOREC

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>173.882</td>
<td>5</td>
<td>34.776</td>
<td>50.769</td>
<td>.000 *</td>
</tr>
<tr>
<td>Residual</td>
<td>72.609</td>
<td>106</td>
<td>.685</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>246.491</td>
<td>111</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

R = .840, R² = .705, Adjusted R² = .692, Durbin-Watson test (DW test) = 1.655

<table>
<thead>
<tr>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.601</td>
<td>.506</td>
</tr>
<tr>
<td>FULPO</td>
<td>.164</td>
<td>.067</td>
</tr>
<tr>
<td>APOX90</td>
<td>-.261</td>
<td>.070</td>
</tr>
<tr>
<td>APOX88</td>
<td>.148</td>
<td>.056</td>
</tr>
<tr>
<td>INCTV</td>
<td>.193</td>
<td>.161</td>
</tr>
<tr>
<td>COREC</td>
<td>.814</td>
<td>.061</td>
</tr>
</tbody>
</table>

Note 1: The dependent variable was YOREC.
Note 2: Variance Inflation Factors (VIF) for independent variables were calculated to examine any multicollinearity issues. VIFs greater than ten generally indicate a serious multicollinearity problem. The scores for this regression ranged from 1.195 to 1.055, which were sufficiently small for this concern to be rejected.
Note 3: A DW test was also conducted to examine whether or not there was serious correlation, because strong correlation will be caused by outliers. In this analysis, the score of the DW test was 1.655, which was acceptable. It is concluded that there is no statistical issue regarding outliers in the analysis.
Note 4: One important assumption for linear regression analysis is that the residuals are normally distributed. In this respect, this research examined the normality of the residuals. The result reported that the skewness was 0.267, which was near zero, and kurtosis was 2.233, which was also near the expected value of 3.0 for normal distribution. Thus these results ensured the normality of the residuals.
Note 5: *** Significant at less than .01, ** Significant at less than .05

Table 4: T-test for Perception Bias

<table>
<thead>
<tr>
<th>Scenario (High or Low)</th>
<th>High (n = 52)</th>
<th>Low (n =60)</th>
<th>Total (n = 112)</th>
<th>T-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (Std. Dev.)</td>
<td>Mean (Std. Dev.)</td>
<td>Mean (Std. Dev.)</td>
<td>T-value (Sig.)</td>
</tr>
<tr>
<td>YOREC</td>
<td>4.77 (1.156)</td>
<td>4.48 (1.467)</td>
<td>4.62 (1.490)</td>
<td>-1.013 (.313)</td>
</tr>
<tr>
<td>COREC</td>
<td>4.56 (1.392)</td>
<td>4.35 (1.313)</td>
<td>4.45 (1.348)</td>
<td>-.812 (.419)</td>
</tr>
<tr>
<td>Perception Bias</td>
<td>.21 (.847)</td>
<td>.13 (.947)</td>
<td>.17 (.899)</td>
<td>1.457 (.648)</td>
</tr>
</tbody>
</table>

Note: Levene’s Test of Equality of Variance reported that equal variances were assumed for T-tests on all three variables.
Table 5: Multiple Regression Result for YOREC<sup>high</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>91,254</td>
<td>4</td>
<td>22,813</td>
<td>41.276</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>25,977</td>
<td>47</td>
<td>.553</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>117,231</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R = .882, R<sup>2</sup> = .778, Adjusted R<sup>2</sup> = .760, Durbin-Watson test (DW test) = 1.710

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.082</td>
<td>.755</td>
<td>1.433</td>
</tr>
<tr>
<td>FULPO&lt;sup&gt;high&lt;/sup&gt;</td>
<td>.170</td>
<td>.093</td>
<td>.136</td>
</tr>
<tr>
<td>APOX&lt;sup&gt;90&lt;/sup&gt;</td>
<td>-.427</td>
<td>.122</td>
<td>-.258</td>
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<tr>
<td>APOX&lt;sup&gt;88&lt;/sup&gt;</td>
<td>.223</td>
<td>.081</td>
<td>.199</td>
</tr>
<tr>
<td>COREC&lt;sup&gt;high&lt;/sup&gt;</td>
<td>.858</td>
<td>.079</td>
<td>.787</td>
</tr>
</tbody>
</table>

Note 1: The dependent variable was YOREC.<br>
Note 2: Variance Inflation Factors (VIF) for independent variables were calculated to examine any multicollinearity issues. VIFs greater than 10 generally indicate a serious multicollinearity problem. The scores for this regression ranged from 1.160 to 1.077, which were sufficiently small for this concern to be rejected.<br>
Note 3: A DW test was also conducted to examine whether or not there was serious correlation because strong correlation will be caused by outliers. In this analysis, the score of the DW test was 1.631, which was acceptable. It is concluded that there is no statistical issue regarding outliers in the analysis.<br>
Note 4: One important assumption for linear regression analysis is that the residuals are normally distributed. In this respect, this research examined the normality of the residuals. The result reported that the skewness was -0.080, which was near zero, and kurtosis was 1.130, which was still acceptable for normal distribution. Thus these results ensured the normality of the residuals.<br>
Note 5: *** Significant at less than .01, ** Significant at less than .05

Table 6: Multiple Regression Result for YOREC<sup>low</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
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<td>20.614</td>
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<td>.000</td>
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<td>Residual</td>
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<td>55</td>
<td>.810</td>
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<tr>
<td>Total</td>
<td>126,983</td>
<td>59</td>
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</table>

R = .806, R<sup>2</sup> = .649, Adjusted R<sup>2</sup> = .624, Durbin-Watson test (DW test) = 1.650

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.683</td>
<td>.731</td>
<td>.934</td>
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<tr>
<td>FULPO&lt;sup&gt;low&lt;/sup&gt;</td>
<td>.164</td>
<td>.095</td>
<td>.148</td>
</tr>
<tr>
<td>APOX&lt;sup&gt;90&lt;/sup&gt;</td>
<td>-.211</td>
<td>.090</td>
<td>-.204</td>
</tr>
<tr>
<td>APOX&lt;sup&gt;88&lt;/sup&gt;</td>
<td>.107</td>
<td>.078</td>
<td>.114</td>
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<tr>
<td>COREC&lt;sup&gt;low&lt;/sup&gt;</td>
<td>.785</td>
<td>.094</td>
<td>.702</td>
</tr>
</tbody>
</table>

Note 1: The dependent variable was YOREC<sup>low</sup>.<br>
Note 2: Variance Inflation Factors (VIF) for independent variables were calculated to examine any multicollinearity issues. VIFs greater than ten generally indicate a serious multicollinearity problem. The scores for this regression ranged from 1.191 to 1.073, which were sufficiently small for this concern to be rejected.<br>
Note 3: A DW test was also conducted to examine whether or not there was serious correlation because strong correlation will be caused by outliers. In this analysis, the score of the DW test was 1.650, which was acceptable. It is concluded that there is no statistical issue regarding outliers in the analysis.<br>
Note 4: One important assumption for linear regression analysis is that the residuals are normally distributed. In this respect, this research examined the normality of the residuals. The result reported that the skewness was 0.432, which was near zero, and kurtosis was 2.253, which was also near the expected value of 3.0 for normal distribution. Thus these results ensured the normality of the residuals.<br>
Note 5: *** Significant at less than .01, ** Significant at less than .05
Notes

1 The Accounting Standards Board of Japan (ASBJ) is a private standards-setting body in Japan established in July 2001. As with the IASB, the ASBJ is expected to promote corporate disclosures and the soundness of the capital markets by preparing accounting standards.

2 Aggressive financial reporting can be defined as the favorable portrayal of a company’s financial reporting, when that reporting is not clearly indicated by the facts and relevant professional literature (Psaros, 2007, 7; Agoglia et al., 2011, 748).