Principles-based accounting standards and regulatory enforcement

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ABSTRACT

Practitioners claim that rules-based accounting standards create a safe harbor shield against liability risk. In contrast, regulators argue that principles-based reporting norms better protect preparers and auditors from undue enforcement threats with its emphasis on substance over form (SEC, 2003). I add to this debate with a proprietary dataset of accounting oversight from South Korea in conjunction with their mandated adoption of IFRS in 2011. This dataset, which archives investigative details and enforcement actions related to accounting allegations, allows me to infer whether a switch to more principles-based IFRS reporting amplifies enforcement risk. Results suggest that IFRS enforcements are associated with a higher propensity of violation detections compared to K-GAAP enforcements. Furthermore, stock price discounts and earnings response coefficient declines are more pronounced when inspection reports disclose violations detected under IFRS regimes. Collectively, these findings are relevant considering the FASB and IASB's joint proposal in support of a more principles-based approach to standard setting (FASB, 2002, 2010).

JEL codes: K22; G11; G14; M41; M42; M48.

Keywords: Rules-based standards; Principles-based standards; IFRS; Safe harbor; Substance over form; Enforcement.

Data Availability: Proprietary government driven regulatory inspection data at the engagement level of the South Korean financial markets from fiscal year 2000 to 2016 has been privately acquired by the Financial Services Commission (FSC) of South Korea. While these records may not be fully publicized, the FSC Korea has agreed to be in full support of validating the accuracy and replicability details of their private inspection records. All other audit and financial market data in this study is obtained from public sources cited in the texts.

"Regulatory creep is the *hidden menace* of the red tape burden. People are left not knowing what is expected of them, what constitutes compliance with the law. But what is very clear is that the penalty will be high if they fail to do the right thing. It is also clear that though hidden, the *menace* is real: uncertainty creates additional burden and cost − Better Regulation Task Force (2004, 3)."

1. Introduction

Section 108(d) of the Sarbanes-Oxley Act mandates the Securities and Exchange Commission (SEC) to conduct a study on the projected changes in enforcement costs upon implementing more principles-based accounting standards in the United States (U.S. House of Representatives, 2002).[1] In its follow up report, the SEC (2003) predicts a decline in enforcement intensity, suggesting that the emphasis on economic substance over form in principles-based standards shields preparers and auditors from frivolous accusations. Practitioners counter this belief: stating concerns of increased liability risk when they can no longer rely on safe harbor protections via compliance with bright-line rules and implementation guidelines (e.g., Nelson, 2003; Donelson, McInnis, and Mergenthaler, 2012). Despite call for more research, there remains little evidence on how enforcement risk varies across rules- versus principles-based GAAP regimes (Schipper, 2003; Donelson, McInnis, and Mergenthaler, 2016).

I inform this debate with a proprietary dataset of accounting oversight obtained from the Financial Services Commission (FSC) of South Korea, spanning fiscal years 2000 to 2016. This dataset details the identity of investigated preparers and auditors and their inspection outcomes, including the specific allegations on whether an engagement is associated with a violation of GAAP. The corresponding time-series of inspec-

[1]The deadline for the commission to submit a report to Congress was specified by July 30, 2003. The full corresponding SEC (2003) study pursuant is available online at the SEC's website at the following URL: https://www.sec.gov/news/studies/principlesbasedstand.htm#1a.

tion records, in conjunction with South Korea's mandatory IFRS adoption in full effect from 2011, allow me to directly infer whether a switch from a rules-based to a more principles-based regime affects the enforcement risk faced by regulated firms and their auditors. A key advantage of the South Korean setting is that their enforcement and regulatory environment has been purposefully government controlled during the initial pre and post five fiscal years with respect to the adoption of IFRS in 2011 with minimum concurrent changes (KASB, 2016). Furthermore, the Korean domestic predecessor (K-GAAP) to IFRS is an ideal benchmark closely patterned after U.S. GAAP; however, more reputable for its meticulous implementation guidelines exhibiting stronger rules-based characteristics. Taken together, the IFRS adoption in South Korea provides a unique research setting to facilitate evidence-informed policy assessments on the implementation of more principles-based reporting norms and its associated enforcement consequences.[2]

The goal of this study is to identify the changes in enforcement and reputational costs faced by preparers and auditors upon implementing more principles-based reporting standards. To operationalize this research, I conduct an event study, which examines whether a mandatory adoption of more principles-based IFRS reporting leads to (1) an increased detection rate of GAAP violations per investigation, (2) stronger enforcement actions settled per detected misconducts, (3) a larger share price discount incurred by firms with reporting standard violations, and (4) a greater decline in their perceived earnings quality.

Donelson, McInnis, and Mergenthaler (2012) document the first archival evidence informing this debate. Their findings suggest that Statements of Financial Accounting

[2]An IFRS post implementation review by the Korean Accounting Standards Board (2016, 7) states that: "Korea's IFRS adoption is quite unique in two aspects. First, Korea adopted IFRS in a 'Big Bang' - style transition, instead of taking a phased-in or convergence approach. All public companies and major financial institutions in Korea were required to adopt IFRS in full at once. Second, IFRS which is a more principles-based accounting standards was adopted by Korea which is a Code law country, where rules-based accounting was prevalent."

Standards (SFAS) exhibiting higher degrees of rules-based characteristics within U.S. GAAP tend to be less frequently cited in shareholder lawsuit allegations. In contrast, a follow up study by Boone, Linthicum, and Poe (2013) questions these results with countervailing evidence revealed from the SEC's 10-K review process, suggesting that relatively more rules-based standards within U.S. GAAP are cited more heavily in comment letters issued by the SEC. Collectively, large sample evidence remains limited and mixed. Furthermore, due to the difficulty in separating the effect of rules-based characteristics of a given accounting standard from the complexity and general characteristics of the underlying transaction, it remains unclear whether rules-based characteristics of reporting norms shield auditors and reporting firms from enforcement and litigation risk, when relying on cross-sectional inferences from within GAAP comparisons of accounting standards. Therefore, a temporal analyses of enforcements across different GAAP regimes can provide a useful triangulation, which better isolates the treatment of rules- versus principles-based characteristics of standards, while holding constant the underlying transaction.[3]

Practitioners argue that a move toward more principles-based IFRS reporting will increase enforcement risk, due to reduced prescriptive guidance, and increased latitude in financial reporting (Nelson, 2003; Schipper, 2003; Kothari, Ramanna, and Skinner, 2010; Kadous and Mercer, 2012; De George, Li, and Shivakumar, 2016). According to their theory, increased second-guessing of accounting estimates, together with reduced

[3]From this viewpoint, the widespread adoption of International Financial Reporting Standards (IFRS) around the globe creates new opportunities for researchers to document changes in enforcement and litigation costs prompted by a switch to more principles-based reporting standards. Regardless, it remains challenging to identify the influence of IFRS reporting on enforcement and litigation risk, due in large part to limitations in data and disparate regulatory regimes (Hope, 2003; Hail, Leuz, and Wysocki, 2010; Christensen, Hail, Leuz, 2013; Barth and Israeli, 2013; Hail, Tahoun, and Wang, 2018). One significant constraint stems from the private nature of country-level data, which archives regulatory inspection reports and litigation outcomes. Another constraint is rooted in the fact that most countries adopting IFRS have adjusted their enforcement and regulatory environments all at the same time. As regards the identification challenge, unique features of South Korea's staggered implementations of recent policy experiements, combined with access to their proprietary inspection records, allow me to overcome the data and setting constraints commonly associated with IFRS adoption studies.

safe harbors associated with principles-based IFRS reporting, contributes to higher liability risk. However, regulators and standard setters express an opposing view, suggesting that the increased flexibility and substantive orientation of principles-based reporting standards should curtail frivolous accusations, thereby protecting preparers and auditors from undue regulatory risk (SEC, 2003). Also, the burden of proof on regulators is likely more pronounced when enforcing a violation of principles compared to a violation of rules. In sum, there is disagreement in the theory and evidence on whether a shift toward more principles-based reporting standards will increase enforcement risk.

To first test how a switch to more principles-based GAAP regimes affect enforcement costs, I estimate a logistic regression comparing the violation detection rates, conditional on an investigation being conducted under K-GAAP versus IFRS enforcement regimes. In multivariate regressions, I include cross-sectional determinants of enforcement risk as covariates in addition to industry and year fixed effects. Results suggest that a switch to IFRS reporting is associated with approximately two times greater enforcement risk, compared to K-GAAP regimes, when measured by the propensity of violation detections controlling for the number of investigations reviewed by the FSS Korea. However, compared to K-GAAP violations, the strength of enforcement actions settled upon IFRS violations do not show a significant difference, both in terms of their monetary penalty and legal constraints imposed. Another noteworthy result suggests that the increased enforcement risk associated with IFRS reporting is more significant among auditors than reporting firms. For instance, a difference-in-difference test comparing the changes in enforcement risk of auditors and firms, following the IFRS adoption event, shows that the increase in detection likelihood is significantly higher for audit firms and CPAs. Overall, I find that preparers and auditors experience a noticeable increase in enforcement risk following the mandate of IFRS reporting in South Korea.

Next, I examine whether public inspection reports of accounting misconducts subject preparers and auditors to higher reputational costs under IFRS enforcement regimes.

I measure reputational costs using unexpected stock price reactions to public announcement events of accounting violations. If IFRS reporting facilitates the detection of more significant violations of principles, better reflective of economic substance over form, I predict that shareholders will penalize the disclosure of IFRS violations with a greater discount. Consistent with this prediction, I show that the size-adjusted cumulative three-day (and five-day) stock returns surrounding the public announcement of IFRS violations are significantly more negative, compared to the public announcement of K-GAAP violations. Such differential market reactions are unique to the disclosure of IFRS violation events. For example, similarly investigated firms with no detected violations exhibit non-distinguishable market reactions, when contrasting the enforcement regimes under K-GAAP and IFRS. I also show a significant decline in earnings response coefficients (ERCs) for misreporting firms, following a detection of GAAP violation, only under IFRS regimes. These findings are consistent with the interpretation that misreporting firms experience a larger loss of market credibility when violating IFRS, which further dampens earnings quality perceptions.[4]

A potential concern interpreting the findings of this study relates to a competing hypothesis which predicts that preparers and auditors report more opportunistically under principles-based standards. Therefore, even when principles-based characteristics of accounting standards have little impact on enforcement and litigation costs, their influence on reporting practices may contribute to an increased enforcement threat. Despite these concerns, prior research suggests that firms tend to report *less* aggressively under more principles-based reporting standards (Agoglia, Doupnik, and Tsakumis, 2011, Collins, Pasewark, and Riley, 2012). The higher share price discount associated with IFRS violation events shown in this study, controlling for the magnitude of enforcement penalties, further supports the notion that increased reputational costs are

[4]The differential market reactions to IFRS violations are robust in multivariate analyses, further controlling for the magnitude of the enforced penalty, industry and year fixed effects, and cross-sectional predictors of expected returns, such as size, book-to-market, and leverage.

associated with IFRS violations, orthogonal to the degree of misreporting induced by a switch of reporting standards.[5]

Sensitivity tests are conducted with alternate sample periods. I first repeat my hypotheses tests while dropping the transition period of fiscal year 2010 and 2011 from the sample and find that statistical inferences remain qualitatively unchanged. I further restrict the sample period to the pre and post three years surrounding the implementation of IFRS in Korea from 2008 to 2013 and find similar results for both enforcement and reputational cost predictions. To further ensure that my event study captures the changes in enforcement threats driven by a switch of reporting standards, additional robustness tests are performed to rule out alternative explanations, such as increased fair value usage, increased note disclosure requirements, and the switch of focus to consolidated financial statements.[6]

I contribute to the discussions on rules- versus principles-based accounting standards in three ways. First, my findings generally favor the view that enforcement threats are likely to increase with a switch to more principles-based reporting regimes, due to its weakened rules-based characteristics, which are often viewed as a safe harbor protection mechanism for preparers and auditors (Donelson, McInnis, and Mergenthaler, 2012). As the FASB, IASB, and SEC have been jointly guiding the enforcement of U.S. GAAP and IFRS toward a more principles-based system in recent years, a steady increase in enforcement and litigation intensity may be expected to persist around the globe (FASB, 2002, 2010; SEC, 2003, 2008, 2010). Second, I provide evidence that such increase in enforcement risk is more likely pronounced for auditors than for reporting firms, which supports the view that auditing will matter more under principles-based regimes. These findings are consistent with the notion of increased emphasis on the

[5]Nevertheless, further disentangling the two effects could be a fruitful subject for future research.

[6]Results suggest that the increase in share price discount and enforcement risk associated with financial misreporting incidences remain significantly higher under IFRS enforcement regimes: each while restricting the analysis to a subset of firm-year allegations unrelated to fair value accounting, note disclosures, or consolidation accounting matters.

accountant / auditor's judgment under more principles-based IFRS reporting practices (e.g., Jamal et al., 2010; Kothari, Ramanna, and Skinner, 2010; De George, Ferguson, and Spear, 2012). Third, from an information and valuation perspective, the market reaction to publicized inspection reports suggest that the capital market penalizes IFRS violations with a heavier share price discount. These heightened market reactions suggest that investors perceive principles-based IFRS enforcements to be more decision useful; hence, informative (Ball and Brown, 1968; Beaver, 1968; Demski, 1973, 1974; Beaver and Demski, 1974). In this regard, I present new evidence suggesting that public regulation provides useful information, and that this informational value can be enhanced by improvement in the underlying standards being enforced (e.g., Benston, 1973; Greenstone, Oyer, and Vissing-Jorgensen, 2006; Aobdia and Shroff, 2017). Consequently, higher reputational costs may be incurred by listed firms detected with principles-based IFRS violations. As U.S. GAAP continues to converge toward a more principles-based model, results from South Korea's policy experiment suggest that benefits from public regulatory oversight, such as SEC comment letters and PCAOB inspection reports, will likely continue to increase in the United States (FASB, 2002, 2010; SEC, 2003, 2008, 2010).[7]

The next section details the institutional background. Section 3 discusses the related literature and empirical predictions. Section 4 describes the research design, and Section 5 presents the empirical results and their robustness. Section 6 concludes with a remark.

[7]This ongoing trend was highlighted in a recently held panel discussion at the 2018 AAA annual meeting in Washington D.C. The discussion on August 6 (panel session 2.05) was titled as the "FASB IASB SEC update", which included three representative panelists: Christine Botosan (FASB), Sagar Teotia (SEC), and Mary Tokar (IASB).

2. Institutional background

2.1. South Korea's policy experiment

In the wake of the Asian financial crises of 1997 and the IMF bailout of South Korea, foreign capital providers and institutional investors exerted greater influence over the Korean financial markets. This created an unprecedented demand for more transparent financial reports prepared according to reporting standards that better reflect underlying economic performance.[8] In response, two long-term reforms were initiated by Korean standard-setting bodies and securities commissions to improve financial reporting practices of listed firms. The first initiative was to strengthen their public regulation model by annually inspecting a sample of financial statements and audit reports filings at the engagement. The second initiative was to consider the mandatory adoption of IFRS reporting.[9]

Figure 1 depicts the sequence of events, summarizing the multi-staged policy experiment conducted in the South Korean financial markets. In 1999, the Korean Finan-

[8]On Nov. 28, 1997, following the Asian financial crises, South Korea's credit rating was downgraded from A1 to A3; Moody's subsequently lowered that rating to B2 on December 11. During this period, the South Korean Won (KRW) weakened, reaching approximately 1,800 KRW per U.S. dollar, when it had previously exchanged at 800 KRW per U.S. dollar. Similarly, on Nov. 7, 1997, the Seoul stock exchange fell by 4%. It plunged by another 7% the next day, setting a record for a daily drop. Further projections of strict IMF demands contributed to another 7.2% drop on Nov. 24, 1997, setting yet another daily crash record. By December 1997, the IMF approved a U.S. $21 billion loan, which ultimately became a part of a total U.S. $58.4 billion bailout package. As South Korea had largely depended on international trade for economic growth, the government was expected to take on substantial regulatory reforms and restructuring efforts in return of the IMF support, most significantly in the financial sector. Foreign capital investments increased exponentially, due to a ceiling regulation on international capital for Korean companies being relaxed from a 26% threshold to 100% rule following the bailout. For instance, one of the most influential Korean financial institutions at this time, Korea First Bank, was taken over by New Bridge Capital during the post- bailout period. This period is replete with examples of international takeovers, accompanied with foreign capital investment spikes.

[9]Such demands for more comparable high quality financial statements in the late 1990s were not necessarily unique to the Korean markets. For instance, Daimler-Benz began to issue U.S. GAAP financial statements in 1996 and Hoechst AG started issuing IFRS reports from 1995. The presumed motive for these German firms to report each under U.S. GAAP and IFRS, in addition to their domestic German GAAP, were to help attract more international capital. Relatedly, similar to U.S. GAAP, IFRS adopts an economic performance approach to financial reporting as opposed to a commercial and tax law approach. Thus, both U.S. GAAP and IFRS financial statements are designed to provide a "true and fair view" summarizing the economic conditions of the reporting entity.

cial Supervisory Services (FSS) was established by combining four preceding commissions previously governing the banking, securities, insurance, and credit management sector.[10] The main objective of this restructuring was to reform the Korean market's regulatory oversight to better deal with the aftermath of the IMF bailout.

Starting from fiscal year 2000, a strengthened inspection model for financial statements and audit reports was implemented, together with the establishment of the FSS Korea. After a few initial years of experimental updates and revisions, the so called "audit review" inspection program became the building block of South Korean securities regulation. While the stronger enforcement model was partly motivated by the aftermath of the Asian financial crises, another important goal was to facilitate longer term preparations for a switch to IFRS reporting.[11]

In March 2007, the South Korean government announced a "Roadmap towards IFRS adoption in Korea" – formally stating that all listed companies would be required to fully adopt IFRS beginning in fiscal year 2011.[12] To minimize expected compliance costs, the roadmap required a Korean IFRS (K-IFRS) to be ready by the end of 2007.[13] In support of this shift, the FSS Korea issued a practical guideline in July 2007 suggesting firms disclose the anticipated effects from IFRS adoption in the footnotes added to their financial statements, starting at least two years prior to their adoption plans. Specifically, preparers and auditors were required to disclose their preparation plans, the status of their progress, and further analyses of projected IFRS adoption effects.

[10]To compare with the US markets, the Korean FSS can be viewed as an institution analogous to the combined roles of the SEC and PCAOB under one single entity.

[11]Studies highlight the importance of a strong regulation and enforcement system to induce effective IFRS reporting (Schipper, 2003; Shima and Gordon, 2011; Christensen, Hail, and Luiz, 2013). Therefore, the South Korean setting ensures that weak oversight will be less of a concern in identifying an IFRS effect.

[12]For nonfinancial firms, voluntary adoption of IFRS was permitted beginning in fiscal year 2009. As a result, an early adoption of K-IFRS was opted by 12 firms in 2009 and 59 in 2010. Since fiscal year 2011, a total of 3,126 firms adopted IFRS (including 1,783 listed firms, 201 unlisted financial institutions, and 1,142 unlisted nonfinancial firms).

[13]This was simply a requirement for a complete word-by-word translation of IFRS into the Korean language.

Several distinctive features of this setting add to the strength of my research design. First, the Korean government opted for a so-called big-bang approach by fully adopting IFRS at a prespecified point, instead of taking a phased-in or convergence approach common in other countries (Jang, Lee, Seo, and Cheung, 2016).[14] Second, the enforcement and litigation environment in South Korea underwent a substantial reformation almost a decade before the ultimate adoption of IFRS. As a result, their regulatory inspection model has been reasonably constant with respect to the pre and post periods of the mandated IFRS adoption event in fiscal year 2011. Third, the Korean domestic predecessor GAAP (K-GAAP) was well known for its strong rules-based orientations, rooted in accounting conservatism, closely following U.S. GAAP. Similarly, the regulatory environment of South Korean markets tends to closely follow that of the United States. Not surprisingly, the most recent decade of the Korean markets, that is the sample period of this study, is closely aligned with the post-SOX environment of U.S. regulation on corporate governance and financial disclosure. Collectively, these features facilitate a cleaner identification to be achieved from the IFRS adoption event study regarding the effects of the switch.[15]

[14]More than 100 countries have adopted IFRS to this date. But not all countries have adopted IFRS to its full extent; China, for example, partially opted into IASB standards with a phased-in approach. Similarly, a nontrivial portion of European Union countries are implementing a localized version of IFRS, adapted to their country specific needs. The United States still prefers to use its own domestic GAAP; however, with the ultimate goal of integrating with international standards (FASB, 2002, 2010; SEC, 2008, 2010). In contrast, South Korea fully adopted IFRS in its original form without localized adjustments or partial omissions.

[15]The South Korean setting has a few additional features that facilitate the identification of IFRS reporting's impact on enforcement threats. First, private shareholder lawsuits against auditors and firms remain rare. This means that government regulation is the predominant source of litigation and enforcement risk for practitioners, with few competing or complementary forces. Second, South Korea follows a civil law system. Research comparing the influence of country-level legal environments shows that civil law-oriented jurisdictions, such as Germany and Japan, are more heavily influenced by IFRS adoption (Li and Yang, 2016). In sum, a strong identification can be expected from the South Korean setting with minimum confounds.

2.2. *Accounting and audit inspections in South Korea*

Figure 2 is a flow chart depicting the FSS Korea's inspection process and the respective timeline for "sampling-based", "suspect-based", and "consigned-based" investigations. In brief, "sampling-based" investigations are the most typical form which combines a set of engagements selected by an analytical risk-based approach together with random sampling methods.[16] Suspect-based investigations are generally initiated by the FSS Korea receiving a report of accounting red flags from connected regulatory institutions. Insider reports are a critical source for suspect-based investigations as well. Consigned-based investigations are prompted by red flags reported from the Korean Institute of Certified Public Accountants (KICPA)' peer review program which administers the accounting and audit review of non-listed firms subject to regulatory oversight in South Korea. Consequently, the violation detection propensity for suspect-based investigations and consigned-based investigations are expected to be higher than for sampling-based investigations.

The number of total investigations is predetermined each year by considering annual resource constraints. This incorporates the year-by-year variation in budget, staff resources, and other investigative obligations of the FSS Korea. Annual inspections consist of two stages: an offsite screening of red flags from firms' financial disclosures and fieldwork at the engagement level which involves interaction with the management, audit team, and each of their legal representatives. If the FSS Korea finds no suspicious indications during the screening stage, the case is dismissed with no further follow-up. In this case, inspection details are kept confidential to the extent that reviewed firms cannot learn whether their financial statements were screened. When suspicious red flags are detected during screening, the FSS Korea notifies the firm and its auditor in

[16] Financial statements are classified as a high risk based on the screening by FSS Korea using proprietary accounting and audit risk models. For example, an unusually high degree of accruals can often trigger a classification as high risk, leading to further investigations.

advance and usually sends a team of experienced former CPAs to conduct thorough fieldwork at the firm's office for a week or two. During this fieldwork, inspectors dissect related work documents and communicate with the engagement team to better understand the nature of work completed during the preparation and auditing of the financial statements.

If the onsite inspectors determine that the work of the reporting firm or its auditor was insufficient, based on applicable reporting standards, the FSS Korea issues a report detailing the alleged deficiencies and recommended enforcement actions to follow. Once the inspection report is approved by multiple committees and authorities, violation details and settled enforcement outcomes are publicly disclosed. These inspection reports are made available online for up to three years following the public release of enforcement actions. In contrast, for engagements resulting in no detections of financial misreporting during the fieldwork, their inspection incidence is kept confidential, and relevant information is shared only between the engagement team and the FSS Korea.[17] In sum, a large part of the inspection process is unobservable and only partial inferences can be drawn from public disclosure, as the information on inspected firms with no detections is kept private. Appendix B includes a more detailed description of the inspection logistics and institutional background.

[17]This is similar to the SEC's annual reviews of 10-Ks: where researchers are only able to observe these investigations when there was a comment letter issued, but not when there was a review of 10-K that led to no detections. In contrast, my study further exploits the private information on investigated firms with no detections. I thank the South Korean Financial Services Commission (FSC) in sharing this sensitive information in support of my research.

3. Prior research and hypotheses

3.1. Related literature

By its very nature, law enforcement creates a demand for detailed rules, implementation guidelines, and bright-line thresholds. In cases of financial misreporting disputes, defendants (issuers and auditors) and plaintiffs (prosecutors and regulators) generally prefer to support their arguments with hardline rules rather than subjective principles (e.g., Schipper, 2003; Madsen, 2011; Kadous and Mercer, 2012; Donelson, McInnis, and Mergenthaler, 2016). Defendants often claim the cost of dealing with litigation and enforcement agencies to be much lower when there is clear guidance as to what is expected.

Yet the theory and evidence on whether rules-based accounting standards shield reporting firms and auditors from enforcement and litigation remain unclear. Some argue that bright-line thresholds and detailed rules act as a safe harbor, protecting preparers and auditors against shareholder lawsuits and public enforcements, while others claim that the specificity of rules-based reporting standards facilitate the plaintiff and investigator's detection of financial misreporting (Donelson, McInnis, and Mergenthaler, 2012).

In support of the protection theory associated with rules-based characteristics of accounting standards, Donelson, McInnis, and Mergenthaler (2012) document the first large-sample evidence from private U.S. securities litigation records. Results from their study suggest that rules-based characteristics within the U.S. GAAP, such as bright-line tests and implementation guidelines, are less likely to trigger shareholder lawsuits. Extending these results to infer the capital market pricing of IFRS adoption prospects in the United States, Joos and Leung (2013) analyze abnormal market reactions to 15 events between 2007 and 2009 affecting the likelihood of IFRS adoption in the States. Their results show that the price reaction to SEC announcements suggesting an increased likelihood

of IFRS adoption are less positive for firms subject to high litigation risk. These findings are consistent with higher legal liability concerns being projected with the ongoing convergence with IFRS reporting in the United States.

However, a similarly motivated study exploting the SEC 10-K review process within the U.S. suggests the opposite (Boone, Linthicum, and Poe, 2013). The evidence from this research shows that more rules-based U.S. GAAP standards tend to be associated with a higher likelihood of a comment receipt triggered by the SEC's annual review on the company's 10-K report. In sum, it remains unclear how principles-based characteristics of standards affect enforcement and litigation risk.[18]

Furthermore, in studying the difference in financial reporting practices each under rules- versus principles-based reporting standards, Agoglia, Doupnik, and Tsakumis (2011) conduct a laboratory experiment showing that reporting choices tend to be less aggressive under principles-based standards. Similarly, Collins, Pasewark, and Riley (2012) document archival evidence in support of this notion by contrasting the reporting choices made under the U.S. GAAP and IFRS for lease accounting. Their results demonstrate that U.S. GAAP firms are more likely to classify their lease contracts as operating than IFRS firms are. Together, these results suggest decreased opportunism in financial reporting practices under more principles-based reporting standards.

The enforcement data and institutional setting used in my study overcomes major limitations of the prior literature investigating enforcement and litigation consequences upon implementation of principles-based reporting standards. First, a large portion of settlement outcomes from shareholder lawsuits are unobservable due to confidentiality agreements. As a result, prior studies heavily rely on inferences drawn from the intensity of shareholder lawsuit filing events with limited evidence from the ul-

[18]Related to this debate, Kadous and Mercer (2012) conduct an experimental study investigating the role of bright-line thresholds in determination of liabilities in auditor negligence cases. Their results suggest that principles-oriented standards act as a double-edged sword, largely depending on the aggressiveness of the client's financial reporting in determining auditor liabilities; thus, producing mixed results.

timate outcome of the lawsuit. In contrast, the enforcement records analyzed in my study shows the full details of all financial statement inspections, the detection of reporting standard violations, and the enforcement action settled for reporting firms and auditors. Thus, the effect of accounting standards on enforcement threats can be more fully understood within my research design. Second, to the best of my knowledge, no prior studies investigate the change in enforcement and litigation trends following a switch to more principles-based IFRS reporting regimes. Therefore, my study extends research exploiting within GAAP variation of accounting standards to a setting that exploits variation across different GAAP regimes characterized by rules- versus principles-based standards. Third, shareholder lawsuits in the United States are often prompted by events that are not specifically tied to financial misreporting. For instance, a large stock price drop can trigger a class action lawsuit (Skinner, 1994). In fact, less than 40% of shareholder class action lawsuits filed during the most recent decade in U.S. securities markets are tied to a specific GAAP violation (Cornerstone, 2018). Often, securities litigations citing an accounting misstatement is a byproduct of a preceding restatement enforced by the SEC. In contrast, my setting allows me to capture the changes in regulatory enforcement specific to financial statement inspections, following the implementation of principles-based reporting standards.

3.2. Predictions

3.2.1. Enforcement cost hypotheses

Critics of the principles-based orientation of IASB argue that IFRS is too general and the implementation guidance too vague, leaving excessive discretion to the reporter.[19] This latitude could make it more difficult for preparers and auditors to ensure confor-

[19]Preparers and auditors in South Korea express continuing frustration with difficulty in adjusting to the IFRS system, citing the absence of implementation guidelines and bright-line rules as the primary challenges. Too much discretion has been a key complaint raised by the practitioners in Korea (KASB, 2016).

mity with reporting choices preferred by the standard-setting bodies and regulators, and thus enforcement and litigation risk may increase. In addition, practitioners have said that the adoption of IFRS will result in more second-guessing of accounting estimates, judgments and auditor decisions, leading to higher legal liability (Kadous and Mercer, 2012). In support of this contention, evidence documented from large sample U.S. studies are consistent with the claim that rules-based standards provide a safe harbor protection to preparers and auditors (Donelson, McInnis, and Mergenthaler, 2012, Joos and Leung, 2013). Nevertheless, there remains high disagreement and uncertainty regarding the anticipated effects of such paradigm shift.[20]

IFRS proponents claim that, under a principles-based approach, the standard setter's objective is made clearer to practitioners and that IFRS reporting results in a closer conformity between accounting numbers and the underlying economic substance. IFRS supporters also argue that U.S. GAAP's rules-based approach incentivizes preparers and auditors to find accounting loopholes by structuring transactions to conform narrowly with specific rules while violating the spirit of the larger principles at stake (Maines et al., 2003; SEC, 2003; Agoglia, Doupnik, and Tsakumis, 2011; Collins, Pasewark, and Riley, 2012).[21] An upwelling of accounting irregularities and scandals in the United States during the early 2000s, such as Enron and Worldcom, seemed to add credibility to this argument. Another argument offered by critics of rules-based systems is that enforcement and litigation costs can be exacerbated by reporting-standard rigidities, since there's an increased likelihood of standard violations which can trigger frivolous ex post accusations. In contrast, these critics claims, under principles-based IFRS regimes, the

[20]Some critics of IFRS claim that, due to the U.S. GAAP containing more detailed rules and implementation guidelines, similar transactions tend to be reported more similarly. These critics say misreporting can be harder to detect, under principles-based standards, due to reduced comparability across firms.

[21]Dye (2002) analytically predicts a "standards creep" when bright-line thresholds dictate accounting classification rules. He points out that official classification rules described in the statement of accounting standards can be vastly different from actual reporting choices realized in equilibrium, which are determined by the de facto (effective) "shadow standards" adopted by practitioners, who may engage in classifications manipulation. In support of this theory, the SEC (2003) predicts a decline in litigation and enforcement, following the implementation of more principles-based standards.

regulator faces a higher burden of proof for showing that misreporting occurred.[22] In sum, proponents of IFRS predict a decrease in enforcement intensity and an increase in enforcement quality when more principles-based accounting standards are implemented (FASB, 2002; SEC, 2003). Below I state the relevant enforcement and litigation cost predictions in the null form.

H1a: The regulator's detection propensity of GAAP violations per investigation remains unchanged following a switch to more principles-based IFRS enforcement regimes.

H1b: The strength of enforcement actions imposed on preparers and auditors detected with a GAAP violation remains unchanged following a switch to more principles-based IFRS enforcement regimes.

3.2.2. Reputational cost hypotheses

Reputational losses priced through market externalities create an extra layer of less direct – but significant – enforcement and litigation costs for preparers and auditors held liable for accounting standard violations (e.g., Feroz, Park and Pastena, 1991; Palmrose, Richardson, and Scholz, 2004; Dee, Lulseged, and Zhang, 2011, 2015; Skinner and Srinivasan, 2012; Aobdia and Shroff, 2017). If IFRS enforcements identify more comparable red flags, better reflecting economic substance over form, I predict that shareholders will discount IFRS violations with a heightened price reaction compared to domestic GAAP violations.[23]

[22] Donelson, McInnis, and Mergenthaler (2012) conceptualizes this argument as the roadmap theory associated with rules-based characteristics of accounting standards, which posits that detailed rules and bright-line thresholds provide investigators and prosecutors a handy roadmap for successful enforcement and litigation.

[23] Beyond comparability enhancements and substance-oriented informational improvements, the big data advantage associated with IFRS reporting may contribute to an improvement in the quality of financial misreporting detections.

Nevertheless, critics cite at least two reasons why IFRS may not improve and may even impair the information content of public enforcement reports. First, the excessive range of options and higher degree of flexibility given to management and auditors may produce noisier financial statement data. This hinders the ability of investigators to detect accounting irregularities with reliable consistency. Second, violations of principles are far more difficult to prove than violations of explicit rules. In sum, I state my reputational cost predictions in the null form, similar to the preceding set of enforcement and litigation cost hypotheses.

H2a: Abnormal stock market reactions to public inspection reports of GAAP violations remain unchanged following a switch to more principles-based IFRS enforcement regimes.

H2b: The magnitude of decline in stock price responsiveness to earnings, triggered by public inspection reports disclosing GAAP violations, remain unchanged following a switch to more principles-based IFRS enforcement regimes.

4. Research design

4.1. Sample and data

Table 1 outlines my sample selection procedure. The initial sample begins with all firm-year financial statements and audit reports investigated by the FSS Korea, which includes the financial statement and audit report inspections from fiscal year 2005 to 2016. Institutionally speaking, while violation details are made publicly available by the FSS Korea's online filing system for up to three years after detection incidences, information on investigated firms resulting in no detected violations is kept strictly

confidential. In contrast, the proprietary data used in this study archives details of all investigated firms and their auditors, regardless of the settled outcome.

International stock returns and accounting data matched with the inspection sample are obtained from Datastream and Compustat Global. I supplement this panel by adding audit and corporate governance information downloaded from the Repository of Korea's Corporate Filings available in DART.[24] The sample period ends in fiscal year 2016 because of data availability. While records are available dating back to 1999, I partition each pre and post window to the six closest fiscal years surrounding the IFRS adoption event in 2011, ensuring that enforcement and litigation regimes were maintained reasonably homogeneous in between the two periods to better isolate the effects of IFRS adoption. As I require sample firms to be listed in South Korean exchanges, all "consigned-based" inspections are excluded from the main analyses.

4.2. Methodology

To test H1a, I estimate a logistic regression modeling the propensity of an investigated firm (or auditor) to be held liable with a violation detection in the following form:

$$Prob(DET = 1)_{it} = F(\alpha_0 + \alpha_1 IFRS_{it} + \alpha^{'} Z + \varepsilon_{it}) \tag{1}$$

where $F(\alpha^{'}X) = \exp(\alpha^{'}X)/[1 + \exp(\alpha^{'}X)]$ denotes an inverse-logit function. The dependent variable (DET) is an indicator variable equal to one if an inspected firm (or auditor) has been detected with a reporting standard violation and otherwise zero. The main explanatory variable of interest ($IFRS$) is an indicator equal to one if an investigation was conducted on financial statements prepared under IFRS reporting, and zero for K-GAAP inspections.

[24]The Data Analysis Retrieval and Transfer (DART) system of Korea is an electronic corporate filing database of firms listed on South Korean exchanges.

Following prior studies investigating the determinants of public enforcement threats of whistleblowing by the SEC and PCAOB or private shareholder litigation risk (e.g., Donelson, McInnis, and Mergenthaler, 2012, 2016; Aobdia, 2018), the design matrix Z includes a comprehensive set of control variables capturing cross-sectional characteristics predicting enforcement and litigation risk. $SIZE$ is the natural logarithm of the market value of equity measured at fiscal year-end. As research documents mixed results for firm size, I make no prediction for this variable. BTM and LEV are book-to-market and firm leverage ratios measured at fiscal year-end; relatedly, I predict a higher detection propensity for growth firms and highly levered firms. Return on assets (ROA), sales growth ($SALESGROWTH$), and cash flows from operations (CFO) are different ways of measuring and controlling for firm profitability; I expect less profitable firms to be more prone to violation detections. I further include accruals ($ACCRUALS$) as a covariate capturing dual facets of the firm. While high accruals may signal aggressive reporting tactics, they may also capture the profitability and growth aspects of the firm. Thus, a prediction on this variable's effect is unclear.

$BIG4$ is an indicator set equal to one if the issuer's engagement involves a globally partnered Big 4 audit firm practicing in South Korea (PricewaterhouseCoopers, Deloitte, KPMG, or Ernst & Young) and zero otherwise. If a Big 4 auditor induces higher quality audits, I expect a lower likelihood of detection incidences to be associated with the financial statements of Big 4 client firms. To further control for financial distress and internal control weaknesses, I include the Altman's Z-score (Altman, 1968) as a measure of bankruptcy risk ($DISTRESS$), and $WEAKNESS$, an indicator variable equal to one if a firm received a qualified opinion (or if the auditor identifies a material weakness) and zero otherwise. I predict a higher likelihood of violation detections to be associated with highly distressed firms or financial statements accompanied by a qualified audit opinion.

In all four tests of H1a to H2b, I report test statistics based on standard errors robust

to heteroskedasticity (White, 1980) clustered by firm. In addition, industry and year fixed effects are included in all regressions. Such fixed effects are intended to control for both time-varying features and time-invariant industry-level factors, such as concurrent regulatory changes, economic shocks, and the levels and changes in industry-specific institutional characteristics influencing inspection choices and detection likelihood.

To test H1b, I estimate an ordered logistic regression (McCullagh, 1984) in the following form:

$$PENALTY_{it} = \beta_0 + \beta_1 IFRS_{it} + \beta^{'} Z + \eta_{it} \tag{2}$$

where the right-hand side covariates are specified identical to the equation (1) described above. The difference between equation (2) and equation (1) is in its newly specified dependent variable ($PENALTY$) which is an ordered categorical variable. Also, equation (2) is estimated on a subset of detected firms with a violation incidence, that is, excluding the set of investigated engagements resulting in no detected deficiencies.

The dependent variable ($PENALTY$) is an ordinal categorization of enforcement actions each tied with misstatements involving immaterial errors, material errors (i.e., unintentional misapplications of GAAP), and accounting irregularities (i.e., intentional misreporting) as defined by the official FSS Korea's trinary classification scheme. Thus, $PENALTY = 3$, if the enforcement actions point to cases of intentional managerial misreporting. $PENALTY = 1$, if the enforcement actions pertain to the lowest level associated with immaterial errors, and $PENALTY = 2$, if the enforcement actions are settled at the intermediate level associated with material errors. For reporting firms, the heaviest form of enforcement actions, $PENALTY = 3$, consists of an indictment or a notice to prosecution, a restriction on securities issuance for more than six months, a mandated auditor designation for two years, or a recommendation of resignation for an executive in charge of detected misconduct. In contrast, the lowest form of enforcement

actions for detected firms, $PENALTY = 1$, generally consist of a cautionary remark, a warning, or a restriction on security issuance for less than six months. I follow a similar rationale in quantifying the categorical enforcement actions of audit firms and CPAs into trinary variables ($PENALTY = 1$, 2, and 3), following the FSS Korea's classification scheme. Details of this scheme are disclosed in Appendix A and B.

To test H2a, referring to the effect of IFRS adoption on the market reactions to publicized inspection reports, I estimate an OLS regression of cumulative abnormal returns around publicized inspection report filing dates in the following form:

$$CAR[-d, +d]_{it} = \gamma_1 + \gamma_2 IFRS_{it} + \gamma_3 DET_{it} + \gamma_4 IFRS \times DET_{it} + \gamma^{'} K + \tau_{it} \qquad (3)$$

where the dependent variable, $CAR[-d, +d]$, denotes cumulative abnormal stock returns during the event window in between days $-d$ to $+d$, with respect to the announcement date of inspection reports publicizing details of the detected violations of reporting firms and their auditors. To maximize the power of the test, I remove systematic noise in daily stock returns unrelated to the announcement event by computing unexpected returns as size-adjusted returns, $R_{id} - R_{pd}$, where R_{id} is the daily return of individual security i on day d and R_{pd} is the daily return of the size-decile-matched benchmark portfolio on the same trading day.[25]

Combined with match controls relating to the cross-section of expected returns, the pre and post-change captured by the IFRS indicator allows me to apply a difference-in-differences inference, contrasting abnormal market reactions to public inspection reports enforcing K-GAAP and IFRS, respectively. As equation (3) is estimated with a sample restricted to all investigated target firms by the FSS Korea, the implicit group of control firms are the set of investigated firms without detected violations. Therefore,

[25]For robustness, I further triangulate these estimations in sensitivity analyses with cumulative abnormal returns constructed from market-adjusted benchmark returns as well as multifactor-adjusted (book to market and size) returns (Jaffe, 1974; Sehyun, 1986; Fama, 1991).

I treat the final case settlement date of the control group as a matched pseudo-event date with the treatment group's violation report date. The $PENALTY$ variable is coded as zero for these control firms which had no detected violations despite being investigated. As $PENALTY$ stands for the announced enforcement action pertaining to detected misconducts, γ_3 captures the differential market reaction to inspection reports with enforcement actions. The main coefficient estimate of interest (γ_4) captures the incremental significance of market reactions to IFRS-related enforcements, compared to K-GAAP inspection reports. To further control for the cross-section of expected returns specific to announcement periods, the K control matrix includes each the $SIZE$, BTM, and LEV variables, respectively.

To test H2b, I estimate a similarly designed regression with equation (3). However, I do so separately for earnings announcement samples consisting of K-GAAP and IFRS violators, each one year before and after a violation report in the form below:

$$\begin{aligned} CAR[-2,+2]_{it} &= \lambda_1 + \lambda_2 UE_{it} + \lambda_3 KPOST_{it} + \lambda_4 UE \times KPOST_{it} + \lambda^{'}\Theta + \delta_{it} \quad (4) \\ CAR[-2,+2]_{it} &= \phi_1 + \phi_2 UE_{it} + \phi_3 IPOST_{it} + \phi_4 UE \times IPOST_{it} + \phi^{'}\Theta + \nu_{it} \end{aligned}$$

where UE is the standardized unexpected earnings computed by realized annual earnings surprises on the premise that the time series of earnings expectations can be reasonably approximated by a random walk process.[26] $KPOST$ and $IPOST$ are indicator variables equal to one if the earnings announcement event happens after the public filing of inspection reports disclosing K-GAAP and IFRS violations, respectively, and zero otherwise. The control matrix Θ includes the set of variables as in the K matrix of equation (3), though it further includes all interaction terms of UE with the three control variables, $SIZE$, BTM, and LEV. The coefficient estimates associated with UE capture the earnings response coefficient (ERC) of a firm's earnings report prior to the viola-

[26] I apply a time-series earnings expectations model due to limited data availability on analyst forecasts covering the sample of firms detected with violation incidences.

tion incidence. Therefore, λ_4 and ϕ_4 each capture the differential response to earnings announcements following the violation incidence. Furthermore, to infer whether IFRS violations result in a higher reputational damage, as measured by the difference in ERC declines, I test whether the difference between the coefficient estimated on the interaction term for the IFRS violation sample and K-GAAP violating sample ($UE \times KPOST$ and $UE \times IPOST$), respectively, is statistically greater than zero. Appendix A further details the variable definitions.

5. Results

5.1. Descriptive evidence

Table 2 summarizes the time-series trends of investigations and detection statistics. A few interesting patterns can be inferred from these univariate sorts.

First, the violation detection likelihood (conditional on an investigation) for financial statements prepared under IFRS is noticeably higher in comparison to K-GAAP investigations. During the fiscal years enforcing K-GAAP from 2005 to 2010, a total of 1,045 investigations were conducted, and 209 of those investigations detected a violation of standards, resulting in a 20% detection ratio. In contrast, during the IFRS enforcement regime, 122 violations were detected out of a total of 293 investigations, pointing to an approximate detection rate of 41.64% (Figure 3, Panel A). Panel B of Figure 3 is an annual bar chart depicting that the spike in detection risk is salient for both preparers and auditors, following the adoption of IFRS reporting.

Second, the total number of investigations has been substantially reduced starting from the period of IFRS reporting mandated in South Korea. One explanation refers to the possibility of violations being detected retrospectively; in other words, an investigation on a fiscal year 2012 financial statement might prompt the investigator to identify

misconduct that occurred in previous fiscal years, such as 2010, 2009, and 2008. In this regard, the number of investigations and detections after fiscal year 2011 can be very much increasing moving forward. Another possible explanation is the upsurge in corporate scandals and financial irregularities centered around fiscal years 2008 to 2010, partly attributable to the global financial crisis, which also affected the South Korean financial markets. Therefore, a nontrivial portion of annual resources may have been shifted toward the investigation of these cases of fraud. Finally, anecdotal evidence suggests that increased time and effort required for IFRS-related enforcement and litigation disputes have contributed to a purposeful reduction in inspection quantity during the beginning stage of IFRS mandates. As the FSS Korea did not expand its monetary and human resources much upon implementing IFRS, the total number of investigations was necessarily reduced to ensure quality control of their audits (KASB, 2016).

Table 3 presents descriptive statistics for the variables used in estimation of equations (1) to (4) as separate panels. While tests of H1a and H2a each involve the full sample of 1,536 investigated firm-year observations, tests of H1b include only a subsample of 430 investigations that led to a detection of misconduct. Similarly, the ERC tests of H2b are conducted with the same subsample of detected firms in H1b tests, though, further requiring earnings announcement data to be available for each tof he pre- and post-detection fiscal years. This leads to a smaller sample, consisting of a total of 188 detected violations for the tests of H2b (Table3, Panel D).

5.2. Does IFRS adoption increase the rate of detected violations?

Table 4 presents the results from estimating equation (1) as tests of H1a. The coefficient estimate associated with the main variable of interest, $IFRS$ (α_1), is strongly positive ($z = 17.01$), suggesting that principles-based IFRS reporting triggers an increase in the regulator's detection propensity of reporting standard violations. The marginal

effects of IFRS, computed as 0.750 in Table 4, implies that IFRS reporting increases the likelihood of violation detection by roughly 75 percentage points. This effect is both statistically significant and economically meaningful. Taken together with the univariate comparison (Figure 3), the multivariate results in Table 4 demonstrates a significant spike in the detection propensity of GAAP violations following a switch to IFRS enforcements. This finding is consistent with the practitioners' claim that principles-based IFRS reporting exacerbates enforcement and litigation risk.

5.3. Are IFRS violations penalized with heavier sanctions?

H1b in alternative form predicts that principles-based IFRS enforcements will strengthen (or weaken) the enforcement actions imposed on preparers and auditors detected with reporting standard violations. Table 5 reports the results from estimating equation (2) as tests of H1b. If IFRS violations are penalized with stronger enforcements, compared to K-GAAP violations, a significantly positive coefficient estimate is expected to be associated with the main variable of interest ($IFRS$). However, this main effect is shown to be statistically insignificant across all three regression estimates each using the enforcement action specific to preparers, audit firms, and CPAs as dependent variables. In sum, despite the conspicuous increase in violation detection risk, IFRS enforcement does not necessarily lead to a strengthening of penalty imposed on regulated firms and auditors detected with financial misreporting.

5.4. Are IFRS violations more informative?

H2a in alternative form predicts a more pronounced (or less pronounced) negative market reaction to public inspection reports of IFRS violations, compared to K-GAAP violations. Table 6 reports the market reaction tests of H2a. To contrast the share price reactions to publicized inspection reports disclosing violations of K-GAAP versus IFRS,

I remove a subset of detected firms in which the enforcement actions forced a temporary delisting from stock exchanges. This sample censoring creates a positive survivorship bias in estimating the abnormal returns following a public filing event of inspection reports. Despite the upward selection bias from this subset of listed firms, results in Table 6 indicate that overall stock market reactions are more negative to public inspection reports of IFRS violations. Panel A shows that average sized-adjusted returns cumulated over the three-days around the announcement window are negative and statistically distinguishable from zero only for reports of IFRS violations, while insignificant reactions are associated with K-GAAP violation reports. In this univariate sort, difference tests show that market reactions to inspection reports are more negative when enforcing IFRS compared to K-GAAP; however, the difference is statistically significant only when an auditor liability is jointly included in the report.

To avoid documenting a spurious correlation between IFRS adoption and stock return movement specific to firms being investigated by the FSS Korea, Panel B tracks the market reactions of investigated firms with no detected violations as a control group. Consistent with the lack of public disclosure events regarding investigations with no detected violations, abnormal market reactions during case settlement periods are statistically indistinguishable from zero under both K-GAAP and IFRS. Similarly, for this control sample, there is no systematic difference identified when contrasting the market reactions specific to K-GAAP and IFRS enforcements.

Panel D of Table 6 further contrasts the unexpected market reaction to K-GAAP versus IFRS inspection reports in an OLS regression with multivariate controls including the enforcement action ($PENALTY$) as a right-hand side covariate. The coefficient estimate associated with $PENALTY$ is statistically indistinguishable from zero, which suggests that abnormal market reactions to K-GAAP enforcement actions are insignificant. In contrast, inferences from the coefficient estimate associated with the interaction term, $IFRS \times PENALTY$ ($-0.013; t = -1.65$), suggests that a misreporting firm's

enforcement action is priced with a pronounced negative market reaction only when violations are detected against IFRS.

Collectively, the univariate and multivariate analyses in Table 6 support the view that, compared to K-GAAP violations, IFRS violations convey more informative red flags to shareholders. The multivariate results in Panel C further highlight the fact that a significant stock price discount is triggered by the public disclosure of enforcement actions pertaining to misreporting firms only under IFRS. The stronger stock market reaction to IFRS inspection reports suggests that IFRS enforcement facilitates the detection of more informative accounting red flags. Consequently, IFRS violators incur a significantly larger market reputational cost when compared to K-GAAP violators.

5.5. Are ERC declines more pronounced following IFRS violations?

H2b in alternative form predicts that firms detected with IFRS violations will experience a sharper decline in ERCs than firms detected with K-GAAP violations. The underlying premise is that perceived financial reporting quality is more significantly dampened following a detected violation enforced against more principles-based accounting standards. I test this hypothesis by extending the previous short-window stock market analyses to a longer horizon and compare the changes in earnings response coefficients (ERCs) following the public disclosure of K-GAAP versus IFRS violation reports.

Table 7 reports estimates of equation (4) as tests of H2b. Results suggest that for firms detected with a K-GAAP violation, the changes in ERCs triggered by the public inspection report of K-GAAP violation is insignificant (-0.014; $t = -0.18$). This may suggest that the information in public inspection reports disclosing K-GAAP violations lags the news content already embedded in prices. In contrast, for firms detected with an IFRS violation, a positive ERC in the pre-violation year (0.142; $t = 1.61$) sharply

decreases to an insignificant ERC in the year following the public filing of inspection reports. In sum, the decline in ERCs triggered by the public disclosure of inspection reports of IFRS violations are statistically significant (-0.066; $t = -2.73$). However, when further applying a difference-in-differences test to the changes in ERCs experienced by each K-GAAP versus IFRS violating firm, inferences suggest an insignificantly larger decline in ERCs of IFRS violators when compared to the decline in ERCs of K-GAAP violators (-0.032; $t = -0.74$).

In sum, the long-window ERC discounts prompted by the public disclosure of accounting violations (Table 7) are qualitatively consistent with the short-window price reactions (Table 6), suggesting a significant and negative reaction only when inspection reports disclose IFRS enforcements. Implications from the market reactions to violation reports are threefold. First, IFRS enforcements result in more informative public inspection reports. Second, public disclosure of IFRS violations results in heavier share price discounts, suggesting a higher reputational cost. Therefore, in addition to the sharp increase in public enforcement risk faced by IFRS reporting firms, there is a significant increase in the private market penalty associated with detected violations when switching from K-GAAP to IFRS. Third, IFRS enforcement facilitates a more timely and effective information transfer from regulators to securities markets. This suggests that public enforcement threats and private market reputational costs can more effectively complement each other when more principles-based standards are enforced.

5.6. Cross-sectional tests: Do audits matter more under IFRS?

Increased subjectivity in IFRS accounting leaves more room for an auditor's judgement and discretion to influence financial reporting decisions. The higher degree of discretion provided to reporting firms and their auditors under principles-based standards implies more responsibility in cases of misreporting disputes. Therefore, audit risk may

disproportionately increase following the adoption of IFRS reporting (De George, Li, and Shivakumar, 2016). Kothari, Ramanna, and Skinner (2010) describe a shift from rules- to principles-based systems as a process of reallocating more accounting choice to the manager, board, and auditor level. Their commentary suggests that the increase in discretion and responsibility experienced under principles-based standards could be more pronounced for auditors, in comparison with reporting managers. I test this hypothesis by focusing on the comparison of enforcement liability risk increase of preparers versus auditors following the adoption of IFRS reporting.

Panel A of Table 8 separately reports the IFRS reporting driven increase in enforcement risk for preparers, audit firms, and CPAs. A difference-in-difference test is performed to contrast the increase in enforcement risk of preparers and auditors. The preparer, audit firm, and CPA each experience a significant increase in enforcement risk during IFRS reporting periods, when estimating Equation (1) individually across each group − similar to the combined results reported in Table 4. In testing the significance of the difference in the coefficient of our main variable of interest ($IFRS$), across preparers versus audit firms and preparers versus CPAs, the t-statistics of 4.84 and 7.65 each suggest a significantly higher increase in enforcement threat for auditors compared to preparers following the adoption of IFRS reporting. Collectively, Table 8 shows strong evidence in support of the claim that the increase in liability risk prompted by IFRS adoption is noticeably higher for auditors in comparison with reporting firms. Furthermore, the disproportionate increase in the auditor's enforcement risk is consistent with the increase in audit fees triggered by the adoption of IFRS documented in recent studies (De George, Ferguson, and Spear, 2013).

Panel B of Table 8 estimates the conditional likelihood of an auditor's joint liability risk, when the engagement firm is detected with a violation, following the adoption of IFRS reporting. In addition to the increase in preparer's violation detection risk per se, these results further suggest that IFRS reporting contributes to an increase in joint liabil-

ity risk faced by a misreporting firm's auditor. The coefficient estimate associated with the IFRS indicator is significantly positive, with a marginal effect of 0.678, suggesting that IFRS reporting increases the conditional probability of an auditor's joint liability by 67.8 percentage points.

Panel C of Table 8 separately analyzes the IFRS reporting driven increase in market discount specific to violation reports of preparers, audit firms, and CPAs. To control for the market valuation of reported enforcement and litigation costs, I include $PENALTY$ as a main right-hand side covariate. Here the coefficient estimate associated with the interaction term, $IFRS \times PENALTY$, suggest that IFRS enforcement actions are priced with a pronounced negative reaction; however, this effect is statistically significant only when the inspection report discloses an auditor liability. This pattern is robust when applying both-sided tests for each case of inspection reports disclosing a violation by the preparer, audit firm, or the CPA. However, difference tests each comparing preparers versus audit firms and the preparers versus CPAs suggest an indistinguishable difference of increased reputational costs introduced by IFRS reporting ($t = -1.28$, $t = -0.86$).

Collectively, the mixed results in Table 8 demonstrate some evidence that auditor's enforcement risk has increased significantly more under IFRS reporting, compared to the increase in preparer's enforcement risk. However, market reactions suggest that the IFRS driven increase in reputational costs associated with violation of standards are not necessarily more pronounced in cases with auditor joint liability. This suggests that the disproportionate emphasis on the role of auditing under IFRS reporting is driven more from public enforcement efforts.

5.7. Sensitivity tests[27]

5.7.1. Alternative sample periods

I repeat the tests of H1a to H2b while dropping the transition period, fiscal year 2011, from the sample and find qualitatively identical results. For instance, the coefficient estimate of α_1 in Table 4 remains negative and statistically distinguishable from zero at the $p = 0.01$ level of significance. I further repeat the analysis in Table 4 to Table 7 while using a shorter sample period, from fiscal year 2005 to 2013, to capture the sharpest variation while removing potential confounds from the staggered adoption of International Standards on Auditing (ISA) in South Korea, from fiscal year 2014. Results remain qualitatively unchanged, suggesting that the results of my difference tests are not sensitive to choices of the event timeline.

5.7.2. Alternative sample firms

Besides a switch from a rules- to a principles-based regime, IFRS adoption in South Korea has also triggered a simultaneous increase in fair value usage and footnote disclosure requirements. To rule out competing explanations relating to IFRS adoption confounds, I repeat my analysis in Table 4 after (1) excluding the sample of firms detected with violations pertaining to footnote disclosures and (2) excluding the sample of firms detected with violations of fair value accounting. Results are qualitatively unchanged in suggesting that IFRS violations are detected with a significantly higher propensity. I repeat the market reaction analyses in Table 6 and Table 7 with this subsample and find qualitatively similar results. Also, as public enforcements have changed their focus from separate to consolidated financial statements, following the mandate of IFRS reporting in South Korea, I repeat the tests of H1a to H2b while restricting the sample to firms without subsidiaries and find qualitatively similar results. Thus, the increase

[27] All untabulated results discussed in this robustness subsection can be made available through an online Appendix upon request.

in enforcement costs following a switch to IFRS reporting is robust to seemingly influential confounds, such as the increase in footnote disclosure requirements, the increase in fair value accounting applications, and the shift of primary focus from separate to consolidated financial statements.

5.7.3. Alternative inspection types

I repeat the tests of H1a to H2b while restricting the full sample to sampling-based investigations (i.e., excluding suspect-based investigations) and find that results remain qualitatively unchanged. Similar results are inferred when restricting the sample to suspect-based investigations (i.e., excluding sampling-based investigations). Furthermore, I test a larger sample of firms that were not restricted to those detected with a first-time violation. While the total number of detections in the sample varies according to these screening conditions, qualitatively similar results are obtained when repeating the short- and long-window market reaction tests of Table 6 and Table 7 with this subsample. Therefore, the results of my hypotheses tests are not sensitive to the specific types of financial statement inspections.

5.7.4. Alternative measures

I repeat my analysis in Table 5 exploiting a finer classification of enforcement actions in measuring $PENALTY$ as a quinary variable in lieu of the original trinary transformation and find qualitatively identical results. I also repeat the analysis in Table 6 and Table 7 with this alternative measure of $PENALTY$ as a control and find that results are qualitatively unchanged. Therefore, my results are not sensitive to alternative measures of enforcement risk. I further repeat each the market reaction tests of H2a and the ERC tests of H2b using alternative measures of returns benchmark models and find that results are qualitatively similar to those reported in Table 6 and Table 7 when applying both market-adjusted returns and multi-factor-adjusted (size and book-to-market)

returns. Thus, the market reaction inferences are robust to various measurements of abnormal returns.

5.7.5. Alternative controls for event date clustering

I repeat all inferences with robust standard errors clustered by event dates. Therefore, standard errors are further clustered by the announcement date of public inspection reports, or annual earnings reports for tests of H2a and H2b, to correct for cross-sectional dependence in the off-diagonal error terms introduced by event date clustering (Schipper and Thompson, 1983; Petersen 2009; Gow, Ormazabal, and Taylor, 2010; Dee, Luseged, and Zhang, 2011). I find qualitatively identical inferences while repeating the market reaction tests of H2a (Table 6) and the ERC tests of H2b (Table 7) when clustering standard errors by event dates instead of firm. Despite resulting in a statistical model with lower power goddness of fit, I also find consistent results when applying robust standard errors clustered by both firm and event dates.

6. Conclusion

Pronounced subjectivity and increased flexibility permitted in IFRS reporting leave more room for the discretion and judgment of practitioners to influence financial reporting decisions. Critics of IFRS often view this as a cumbersome feature, which exacerbates audit and financial reporting risk and subjects preparers and auditors to higher enforcement and litigation threats (Schipper, 2003; Kothari, Ramanna, and Skinner, 2010; Kadous and Mercer, 2011; Donelson, McInnis, and Mergenthaler, 2012; Joos and Leung, 2013). Consistent with such claims, accounting and audit practitioners under IFRS reporting decry the principles-based nature of international standards, often demanding more clarity in regulatory thresholds, rules, and implementation guidelines.

Adding to this debate, I present a difference-in-differences designed event study on

South Korea's recent move to fully mandate IFRS reporting, which replaced its rules-based domestic predecessor (K-GAAP). Inferences drawn from a proprietary dataset, archiving inspection records of South Korean accounting oversight from fiscal years 2005 to 2016, demonstrate a noticeable increase in enforcement risk triggered by a switch to more principles-based standards. Moreover, reputational costs priced in the capital markets, incurred by misreporting preparers and auditors, are also significantly higher following the adoption of IFRS. These findings add to the extensive accounting literature investigating rules- versus principles-based reporting standards and its associated economic consequences.

From a broader perspective, I provide evidence consistent with the belief that increased enforcement threats are associated with less rigid regulatory standards. This insight can be further applied to more general matters of the law and economics associated with regulation and standard setting matters. For instance, traffic control and food industry regulation, are just few examples where regulated entities and regulators constantly debate about red tape burdens induced by less detailed standards.

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Appendix A. Variable definitions

Each panel provides a description of the the dependent variables, main variables of interest, and control variables used in this study. Data is obtained through the Financial Services Commission (FSC) of South Korea, Compustat Global, and Datastream vendor provided sources. Continuous variables are winsorized at 1% and 99% of the distribution except for the set of dependent variables. All monetary (KRW) amounts are stated in millions.

A.1. Dependent variables

$DET = 1$ if firm i is detected with a violation of accounting standards from FSS Korea's investigation regarding fiscal year t, 0 otherwise;

$PENALTY\ (preparer) = 1$ if reporting firm i is subject to an enforcement action, pertaining to fiscal year t's financial statements detected with an immaterial error, which typically consists of a cautionary remark, a warning, or a restriction on securities issuance for less than six months; 2 if the enforcement action pertains to a detection of material errors, which consists of a mandatory auditor designation in addition to the enforcement actions imposed for immaterial errors; and 3 if the highest degree of sanctions associated with intentional managerial misreporting are imposed, such as an indictment, a notice to prosecution, a recommendation of an executive resignation, in addition to the enforcement actions imposed for $PENALTY = 2$;

$PENALTY\ (audit\ firm) = 1$ if audit firm j is subject to an enforcement action, pertaining to fiscal year t's engagement of preparer i's financial statements detected with an immaterial error; 2 if the enforcement action pertains to a detection of a material error; and 3 if the highest degree of sanctions associated with intentional violations are imposed (the lowest sanction, $PENALTY = 1$, typically consists of a cautionary remark or a warning; $PENALTY = 2$ and 3, both consists of a mixture of fines, restriction on audit scope, and contribution to funds for damage compensation; while $PENALTY = 3$ simply imposes heavier restrictions);

$PENALTY\ (CPA) = 1$ if CPA k is subject to an enforcement action, pertaining to fiscal year t's engagement of preparer i's financial statements detected with an immaterial error; 2 if the enforcement action pertains to a detection of a material error; and 3 if the highest degree of sanctions associated with intentional violations are imposed (the lowest sanction, $PENALTY = 1$, typically consists of a restriction on audit scope; both $PENALTY = 2$ and 3, generally consists of a license suspension recommendation and a restriction on audit scope; $PENALTY = 3$ further includes a notice to prosecutor or an indictment);

$CAR[-d, +d]$ = Size-adjusted cumulative stock returns of firm i, during days $-d$ to $+d$, with respect to the public announcement of fiscal year t inspection reports.

A.2. Explanatory variables

$IFRS$ = 1 if firm i reports under IFRS in fiscal year t, 0 otherwise;

UE = standardized unexpected earnings computed by the difference between realized earnings of firm i in fiscal year t and its reported earnings in fiscal year $t-1$, further deflated by the price per share of firm i at the end of fiscal year t;

$KPOST$ = 1 if the annual earnings announcement of firm i's fiscal year t reports is held subsequent to the regulator's filing of a public inspection report detecting a K-GAAP violation, 0 otherwise;

$IPOST$ = 1 if the annual earnings announcement event of firm i's fiscal year t reports is held subsequent to the regulator's filing of a public inspection report detecting an IFRS violation, 0 otherwise.

A.3. Control covariates

$SIZE$ = natural logarithm of firm i's market value of equity measured at the end of fiscal year t;

BTM = book-to-market ratio of firm i at the end of fiscal year t;

LEV = total debt, including both short term and long term debt of firm i, divided by the sum of total debt and equity at the end of fiscal year t;

ROA = earnings before extraordinary items of firm i for fiscal year t, scaled by total assets;

$SALESGROWTH$ = sales growth of firm i from fiscal year $t-1$ to t;

CFO = firm i's cash flows from operations reported in fiscal year t, defalted by its total assets;

$ACCRUALS$ = firm i's total accruals reported in fiscal year t, deflated by its total assets;

$BIG4$ = 1 if firm i's fiscal year t financial statements were audited by a globally partnered Big 4 audit firm, 0 otherwise;

$DISTRESS$ = The Z-score of Altman [1968] for firm i inferred from financial reports of fiscal year t, measured as, $Z = 1.2\times\left(\frac{\text{ACT}-\text{LCT}}{\text{AT}}\right) + 1.4\times\left(\frac{\text{RE}}{\text{AT}}\right) + 3.3\times\left(\frac{\text{PI+XINT}}{\text{AT}}\right) + 0.6\times\left(\frac{\text{CSHO}\times\text{PRCC\_F}}{\text{LT}}\right) + 1.0\times\left(\frac{\text{SALE}}{\text{AT}}\right)$;

$WEAKNESS$ = 1 if firm i received a qualified opinion, or if the auditor identifies a material weakness in fiscal year t, 0 othewise.

Appendix B. Accounting oversight in South Korea

Below is a summary excerpt from the official webpage of FSS Korea which can be found online at the following URL: http://english.fss.or.kr/fss/eng/wpge/eng2231.jsp.

B.1. Overview

The legal framework for accounting supervision comprises the Financial Investment Services and Capital Markets Act (FSCMA), the Act on External Audit of Stock Companies (AEASC), and the Certified Public Accountant Act.

The FSCMA provides disclosure measures such as the periodic filing of business report to ensure the accuracy and reliability of financial reporting. It requires audited financial reporting from listed companies that are subject to business reports. The FSCMA also requires companies to continually operate internal controls, evaluate internal audit and the external auditors, and provide detailed assessment in their business report.

The AEASC provides for independent external audit of listed companies and others subject to independent external audit. Listed companies are required to appoint an auditor for a three-year term but may dismiss the auditor before the three-year term ends with the approval of the company's audit committee and reporting to the SFC. The Certified Public Accountant Act governs the qualification, registration, services, rights, and duties of certified public accountants (CPAs) and accounting firms. CPAs and accounting firms must register with the FSC/FSS. Under the AEASC, any group of three or CPAs that operates as a non-business entity must register with the Korean Institute of Certified Public Accountants to carry on audit performance.

Companies subject to external audit are required to present financial statements in accordance with the established accounting standards. With accounting oversight authority delegated from the SFC, the FSS examines listed companies' and unlisted financial services firms' financial statements and the audit performed while it inspects the auditor's report. Companies subject to external audit must also operate with an internal accounting management system for the preparation of accounting information. The auditor must also prepare an evaluation of the actual status of the audited company's internal accounting management system and provide it in the business report.

B.2. Accounting and audit review / inspections

The chief executive officer of a listed company is responsible for the preparation of the company's financial statements in accordance with the established accounting standards. The company's auditor then performs an independent audit of the accuracy and the reliability of the company's financial statements and delivers an audit opinion. The primary objective of accounting supervision is to review whether financial statements and the auditor's report are prepared according to the relevant standards.

Reviewing the design and operation of auditors' quality control systems is another important accounting supervision objective.

B.3. Firms subject to accounting and audit reviews

Under the authority delegated from or charged by the SFC, the FSS performs a review of audited financial statements from listed companies and unlisted financial services firms. The Korean Institute of Certified Public Accountants (KICPA) contributes to the audit review process by performing reviews of audited financial statements from companies not covered by the FSS. Audit review broadly falls into either a targeted audit review or a sample audit review. The FSS conducts a targeted audit review when:

- The FSC requests a review;
- The FSC or the SFC suspects an accounting or audit violation;
- The SFC receives a request from a law enforcement authority with specific allegations about an accounting or audit violation; or
- The SFC receives a request from a corporate insider, an audit participant, or other sources with credible charges of accounting misconduct.

The FSS also conducts a sampling based accounting and audit review by employing quantitative analysis methods utilizing financial analysis tools or random sampling methods.

B.4. Accounting and auditing standards

Financial statements are prepared and presented in accordance with the accounting standards, while audits by external auditors are conducted in accordance with audit standards. The FSC delegates the authority to set accounting standards to the Korea Accounting Institute (KAI) under the oversight of the SFC. Following the announcement of a roadmap for the full adoption of the International Financial Reporting Standards (IFRS) in March 2007, the IFRS became mandatory for all listed companies, unlisted financial institutions, and companies set to go public beginning in 2011. Despite the adoption of IFRS, auditors were required to perform audit in accordance with the auditing standards set by the Korean Institute of Certified Public Accountants which follow the IFAC's Clarified ISA until fiscal year 2013. More recently, International Standards on Auditing (ISA) became mandatory from fiscal year 2014 as a staggered introduction switching to international reporting and auditing standards.

B.5. Example of a publicly released inspection report from FSS Korea

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Detected Violations and Verdict on Review Results
(Securities & Financial Committee [SFC], 2017.11.15. Verdict)

Reporting Firm: Hyundai Engineering & Construction Co., Ltd. (KRX: 000720)
Fiscal Period: 2013.12.31., 2014.09.30., 2014.12.31., 2015.12.31., 2016.12.31.
Industry: General Construction Business

(units: million)

Detected Violations (Preparer)

- Revenue (& COGS) recognition violation; related assets are overstated while liabilities are understated (same for separate and consolidated: '13.12.31. KRW 51,766, '14.9.30. KRW 218,307, '15.12.31. KRW 105,829, '16.12.31. KRW 91,319)
  - The accounting for total planned construction cost ignores the substantial increase in expected costs arising from construction site environment changes
  - As the progress of construction rate is computed without reflecting this change, the revenue (COGS) and assets (liabilities) are each overstated (understated) during the construction period
- Accounting errors of subordinate's financial statements were applied without correction in reports of consolidated statements (consolidated: '13.12.31. KRW 37,146, '14.9.30. KRW 75,401, '14.12.31. KRW 58,995, '15.12.31. KRW 58,995)
  - Due to usage of a subordinate's erroneous financial statement without correction in consolidated reports, revenue (COGS) and assets (liabilities) are consequently overstated (understated)
- Allowance for doubtful (construction) receivables are underestimated (same for separate and consolidated: '15.12.31. KRW 12,791, '16.12.31. KRW 12,791)
  - While there were known damages on the financial conditions of remaining construction receivables, the reporting firm has maintained the application of a high credit rating on a distressed developer to underestimate their allowances.
- False reporting in registration statements
  - In four cases of registration statements filed in between 2014.8.28. – 2016.11.2. the issuing firm has used financial statements of fiscal year 2013, 2014, and 2015 which are each in violation of financial reporting standards

[2013.12.31.]

(Separate) Net Income	$360,278 \rightarrow 308,512$
(Separate) Equity	$4,683,826 \rightarrow 4,632,060$
(Consolidated) Net Income	$569,644 \rightarrow 480,731$
(Consolidated) Equity	$5,203,075 \rightarrow 5,114,162$

[2014.9.30.]

(Separate) Net Income	$236,556 \rightarrow 70,015$
(Separate) Equity	$4,848,564 \rightarrow 4,630,257$
(Consolidated) Net Income	$410,393 \rightarrow 206,143$
(Consolidated) Equity	$6,784,779 \rightarrow 6,491,071$

[2014.12.31.]

(Separate) Net Income	$313,135 \rightarrow 205,406$
(Separate) Equity	$4,946,384 \rightarrow 4,786,889$
(Consolidated) Net Income	$586,697 \rightarrow 457,119$
(Consolidated) Equity	$6,966,312 \rightarrow 6,747,821$

[2015.12.31.]

(Separate) Net Income	$276,558 \rightarrow 317,433$
(Separate) Equity	$5,227,964 \rightarrow 5,109,344$
(Consolidated) Net Income	$584,027 \rightarrow 683,898$
(Consolidated) Equity	$7,491,265 \rightarrow 7,372,645$

[2016.12.31.]

(Separate) Net Income	$243,052 \rightarrow 347,162$
(Separate) Equity	$5,484,518 \rightarrow 5,470,008$
(Consolidated) Net Income	$650,376 \rightarrow 754,486$
(Consolidated) Equity	$8,142,307 \rightarrow 8,127,797$

Enforcement Actions (Preparer)

- Mandatory auditor designation 1 year (2018.1.1. – 2018.12.31.)
- Fines (final amount of charge will be later determined by the Financial Services Commission [FSC] with reference to the Financial Investment Services & Capital Markets Act)

Detected Violations (Auditor)

- Audit procedure failure on revenue (same for separate and consolidated: '13.12.31. KRW 51,766, '14.12.31. KRW 159,495, '15.12.31. KRW 105,829, '16.12.31. KRW 91,319)

  - The auditor failed to appropriately detect the underestimation of total planned construction costs for few construction sites

- Audit procedure failure on consolidated financial statements (consolidated: '14.12.31. KRW 58,995, '15.12.31. KRW 58,995)

  - The auditor failed to detect a violation of reporting standards in the entity's subordinate's separate financial statements when reviewing the consolidated statements in the audit report

- Audit procedure failure on review of estimates of allowance for doubtful (construction) receivables (same for separate and consolidated: '15.12.31. KRW 12,791, '16.12.31. KRW 12,791)

  - The auditor failed to properly assess the creditworthiness of receivable components in its audit report

Enforcement Actions (Audit Firm: Deloitte Anjin LLC)

- Fines (final amount of charge will be later determined by the Financial Services Commission [FSC] with reference to the Financial Investment Services & Capital Markets Act)
- Additional 20% contribution to funds for damage compensation
- Audit restriction on Hyundai Engineering & Construction Co., Ltd. (KRX: 000720) for 2 years

Enforcement Actions (CPA: 1 individual)

- Audit restriction on Hyundai Engineering & Construction Co., Ltd. (KRX: 000720) for 1 year
- Restriction on audit scope for 1 year
- Job training session 6 hours

B.6. FSS Korea enforcement action matrix

〈 Preparer sanctions 〉

Consequence \ Motivation	Intentional Misreporting	Material Error	Immaterial Error
High	• Notice to prosecution • Recommendation of executive resignation • Recommendation of auditor (audit committee) resignation • Mandated auditor designation for 2 years • Restriction on securities issuance for 8 months (or fines)	• Recommendation of executive resignation • Recommendation of auditor (audit committee) resignation • Mandated auditor designation for 2 years • Restriction on securities issuance for 6 months (or fines)	• Mandated auditor designation for 1 year • Restriction on securities issuance for 2 months
Medium	• Notice to prosecution • Recommendation of executive resignation • Recommendation of auditor (audit committee) resignation • Mandated auditor designation for 2 years • Restriction on securities issuance for 6 months (or fines)	• Mandated auditor designation for 2 years • Restriction on securities issuance for 4 months (or fines)	• Mandated auditor designation for 1 year • Restriction on securities issuance for 1 month
Low	• Notice to prosecution • Recommendation of executive resignation • Mandated auditor designation for 2 years • Restriction on securities issuance for 4 months (or fines)	• Mandated auditor designation for 1 year • Restriction on securities issuance for 4 months (or fines)	• Warning

⟨ Audit firm sanctions ⟩

Consequence \ Motivation	Intentional Misreporting	Material Error	Immaterial Error
High	• Restriction on engagement firm's audit scope for 3 years • Additional 70% contribution to funds for damage compensation • Fines	• Restriction on engagement firm's audit scope for 3 years • Additional 50% contribution to funds for damage compensation • Fines	• Restriction on engagement firm's audit scope for 2 years • Additional 20% contribution to funds for damage compensation
Medium	• Restriction on engagement firm's audit scope for 3 years • Additional 50% contribution to funds for damage compensation • Fines	• Restriction on engagement firm's audit scope for 2 years • Additional 30% contribution to funds for damage compensation • Fines	• Restriction on engagement firm's audit scope for 1 year • Additional 10% contribution to funds for damage compensation
Low	• Restriction on engagement firm's audit scope for 2 years • Additional 30% contribution to funds for damage compensation • Fines	• Restriction on engagement firm's audit scope for 2 years • Additional 20% contribution to funds for damage compensation • Fines	• Warning

〈 CPA sanctions 〉

Consequence	Motivation		
	Intentional Misreporting	Material Error	Immaterial Error
High	• Notice to prosecution • Recommendation of license suspension for 1 year • Restriction on engagement firm's audit scope for 4 years • Restriction on audit scope for 1 year • Job training session 16 hours	• Recommendation of license suspension for 6 months • Restriction on engagement firm's audit scope for 3 years • Restriction on audit scope for 1 year • Job training session 12 hours	• Restriction on engagement firm's audit scope for 1 year • Restriction on audit scope for 1 year • Job training session 6 hours
Medium	• Notice to prosecution • Recommendation of license suspension for 6 months • Restriction on engagement firm's audit scope for 3 years • Restriction on audit scope for 1 year • Job training session 12 hours	• Restriction on engagement firm's audit scope for 2 years • Restriction on audit scope for 1 year Job training session 8 hours	• Restriction on engagement firm's audit scope for 1 year • Job training session 4 hours
Low	• Notice to prosecution • Restriction on engagement firm's audit scope for 2 years • Restriction on audit scope for 1 year • Job training session 8 hours	• Restriction on engagement firm's audit scope for 1 year • Restriction on audit scope for 1 year Job training session 6 hours	• Job training session 4 hours • Warning

Appendix C. K-GAAP vs. IFRS comparison

The below discussion is an excerpt summarizing Jang, Lee, Seo, and Cheung (2016)'s page 1652 commentary on the IFRS adoption in South Korea. Major differences between IFRS versus K-GAAP and their expected consequences are as follows. First, the biggest difference is highlighted by the rules-based features of K-GAAP, while IFRS is more reputable for its principle-based approach. Such difference has created a significant increase in room for preparers and auditors' discretion and judgement to influence IFRS reporting decisions. Second, primary financial statements are separate statements in K-GAAP, while consolidated statements are primary financial statements in IFRS. The emphasis on separate financial statements in K-GAAP relates to a few unique features of the firms operating in Korean financial markets. For instance, conglomerates with complicated ownership structures are more prevalent in Korean markets, while both subordinated and dominant companies are listed. Third, while IFRS requires fair value accounting for most assets and liabilities, K-GAAP permits fair value accounting only on a restricted basis - primarily requiring firms to report under historical costs. In this regard, IFRS emphasizes increased financial statement value relevance; whereas, K-GAAP posits a more conservative stance in prioritizing reliability facets. Lastly, IFRS demands more detailed footnote disclosures in order to supplementarily explain the increased management and auditor discretion applied in the usage of principles-based accounting standard. This feature of IFRS reporting results in more footnote disclosures, often times contributing to increased burdens on preparers and auditors of IFRS financial statements (De George, Li, and Shivakumar, 2016).

K-GAAP	IFRS	Expected Changes
Rules-based accounting standards	Principles-based accounting standards	Increased discretion by preparers and auditors
Primary focus on separate statements	Primary focus on consolidated statements	Comparability and relevance enhancement
Historical cost accounting	Fair value accounting	Increased usage of fair value measurements
Discretionary footnote disclosures	Detailed requirements on footnote disclosure	Improvement in footnote disclosures

Figure 1

Event timeline.

This figure outlines the timeline, in between 1997 to 2016, depicting the staggered implementation of multiple policy experiments in South Korean financial markets.

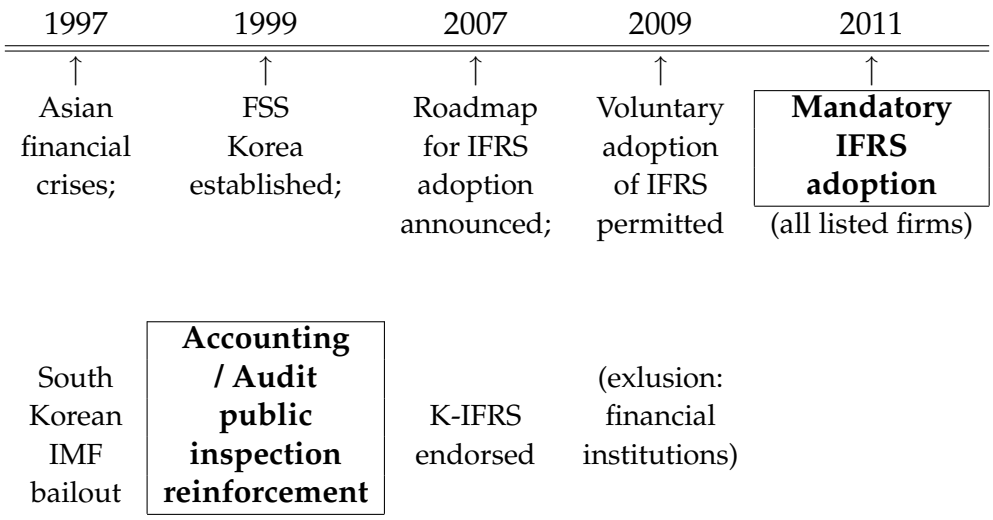


Figure 2

Financial Supervisory Service (FSS) of Korea's inspection model.

This figure graphically summarizes the step by step review process and inspection logistics describing the FSS Korea's investigations on financial statements and audit reports.

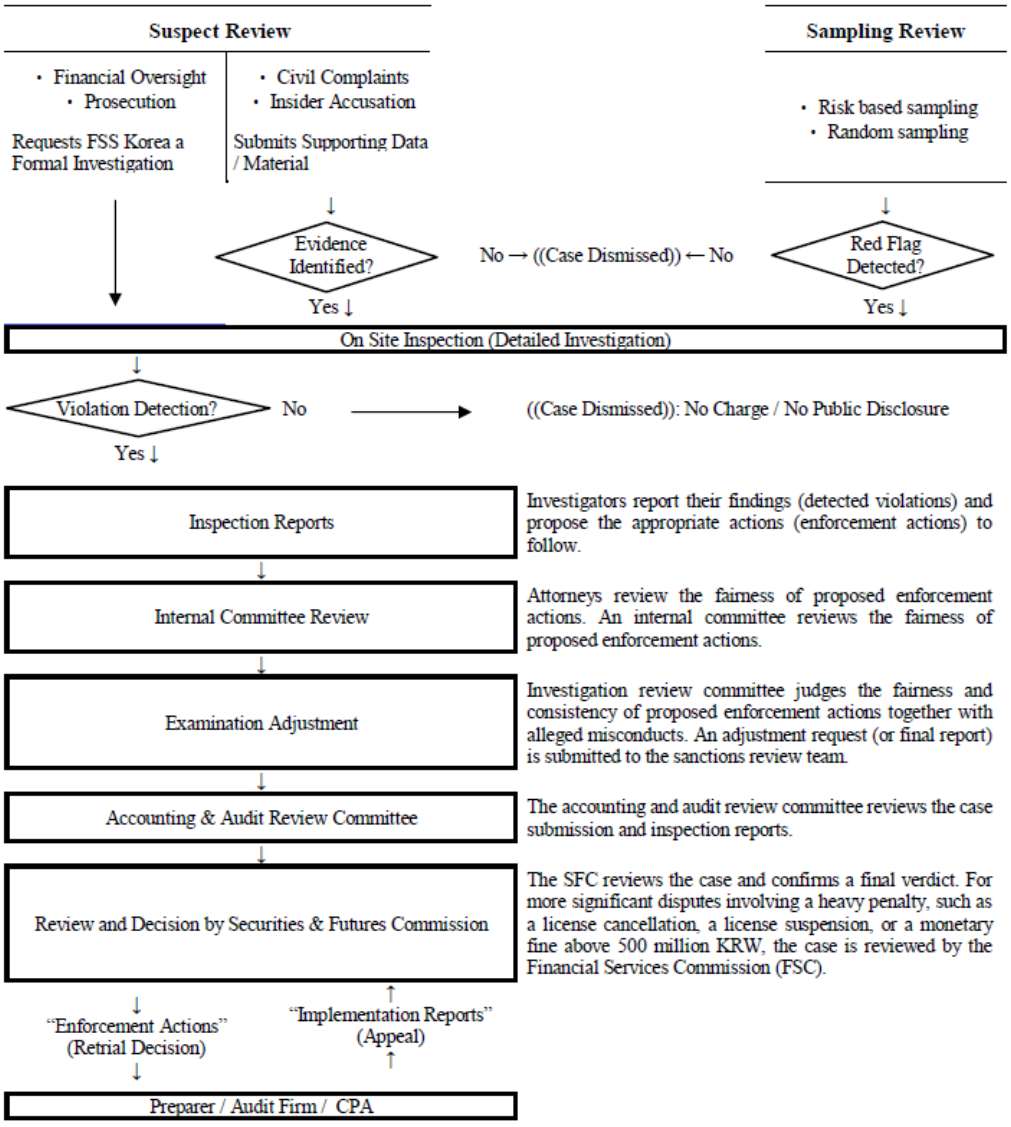
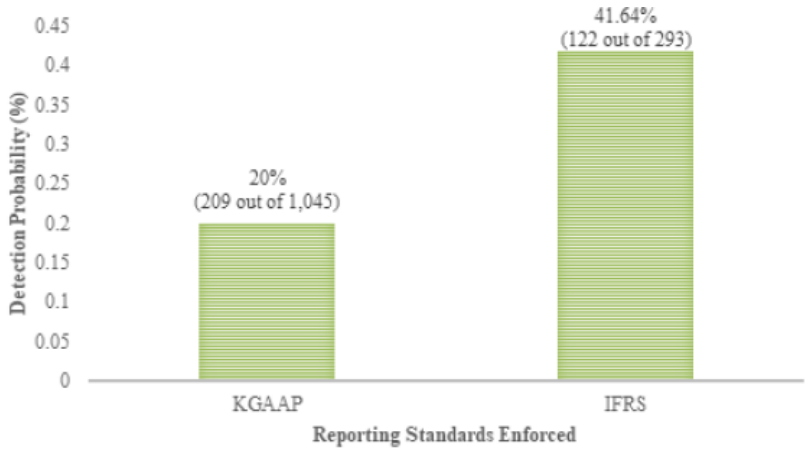


Figure 3

Financial misreporting detection likelihood.

This figure displays the propensity of financial misreporting detections under K-GAAP and IFRS regimes. The top panel in this figure compares the violation detection propensity of financial statement investigations enforcing K-GAAP versus IFRS. The bottom panel plots the annual detection propensity of financial statements from fiscal year 2005 to 2015.

Panel A: K-GAAP vs. IFRS financial statement investigations



Panel B: Bar charts per fiscal year of financial statements

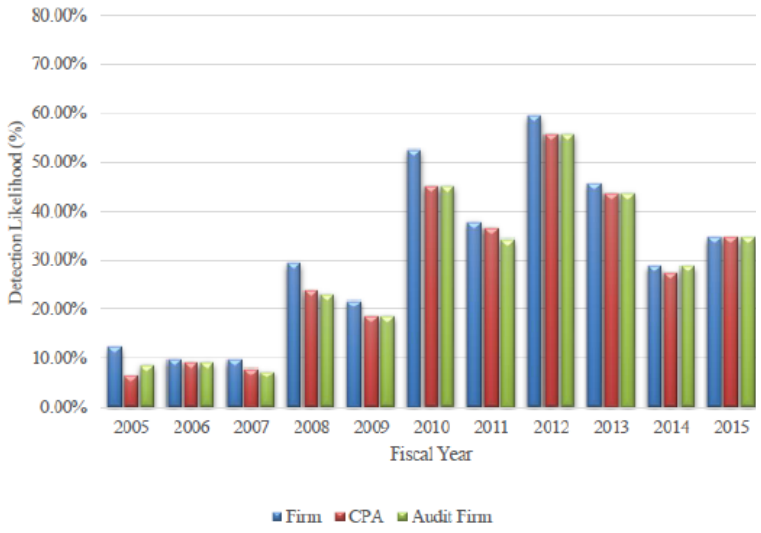


Table 1

Sample selection.

This table summarizes my sample selection. The intial sample begins with firm-year engagements investigated by the FSS Korea from fiscal year 2005 to 2016. I require issuing firms to be listed in South Korean exchange markets. I remove observations with missing data on the main variables in need for hypotheses tests. The final sample consists of 1,536 financial statement investigations that led to a total of 472 detections in between fiscal years 2005 to 2016.

Criteria	Firm-Year Obs
(1) FSS Korea inspection sample from fiscal years 2005 to 2016	2,186
(2) Sampling and suspect initiated inspections	2,044
(3) Listed in KOSPI or KOSDAQ stock exchange markets	1,901
(4) Non-missing values for independent and dependent variables	1,536
Final sample of all inspected firm / auditor-years	1,536
Final sample of inspected and detected firm / auditor-years	472

Table 2

Time-series summary statistics.

The top panel of this table reports the number of investigations and detections pertaining to financial statements from fiscal year 2005 to 2016. The bottom panel reports the type of detected violations for financial statement investigations from fiscal year 2005 to 2016 (only for listed firms).

INV Type	Fiscal Year	Total INV#	Firm DET#	CPA DET#	Audit Firm DET#	Fiscal Year	Total INV#	Firm DET#	CPA DET#	Audit Firm DET#
sampling		281	33	16	21		87	29	25	26
suspect	2005	35	32	20	21	2011	48	45	38	38
consigned		4	4	3	3		22	21	20	20
sampling		191	20	16	16		48	21	19	19
suspect	2006	37	36	22	24	2012	38	31	30	31
consigned		7	6	4	5		10	9	10	10
sampling		265	38	28	28		52	18	17	17
suspect	2007	36	35	23	25	2013	37	27	28	30
consigned		12	11	9	9		4	4	4	3
sampling		208	67	46	46		71	17	17	17
suspect	2008	56	51	37	39	2014	14	10	10	12
consigned		25	24	19	20		1	1	1	1
sampling		255	68	53	53		26	7	7	7
suspect	2009	68	63	54	56	2015	4	3	3	4
consigned		29	28	22	22		4	4	4	4
sampling		119	57	50	51		4	4	4	4
suspect	2010	64	62	52	56	2016	0	0	0	0
consigned		28	28	26	26		0	0	0	0

Table 3

Descriptive statistics.

This table presents the descriptive statistics for each sample selected for tests of H1a to H2b. All variable descriptions are in Appendix A. Except for the set of dependent variables, all continuous variables are winsorized at their 1st and 99th percentiles.

Panel A: Variables in Detection Propensity Tests (H1a)

Variable	*N*	*Mean*	*Std.Dev.*	*P*1	*P*25	*Median*	*P*75	*P*99
DET	1,536	0.292	0.455	0.000	0.000	0.000	1.000	1.000
IFRS	1,536	0.187	0.390	0.000	0.000	0.000	0.000	1.000
SIZE	1,536	18.731	1.583	15.971	17.613	18.360	19.509	23.496
BTM	1,536	1.163	0.941	-0.268	0.498	0.938	4.541	4.786
LEV	1,536	0.487	0.228	0.055	0.311	0.487	0.645	1.105
ROA	1,536	-0.078	0.306	-1.892	-0.103	0.015	0.058	0.321
SALESGROWTH	1,536	0.155	0.688	-0.813	-0.099	0.048	0.206	4.696
CFO	1,536	0.006	0.159	-0.727	-0.048	0.022	0.085	0.368
ACCRUALS	1,536	0.011	0.128	-0.494	-0.035	0.025	0.073	0.360
*BIG*4	1,536	0.517	0.500	0.000	0.000	1.000	1.000	1.000
DISTRESS	1,536	9.746	16.897	-78.750	6.563	13.586	18.442	35.517
WEAKNESS	1,536	0.020	0.138	0.000	0.000	0.000	0.000	1.000

Panel B: Variables in Enforcement Strength Tests (H1b)

Variable	*N*	*Mean*	*Std.Dev.*	*P*1	*P*25	*Median*	*P*75	*P*99
PENALTY	448	1.964	0.851	1.000	1.000	2.000	3.000	3.000
IFRS	448	0.275	0.447	0.000	0.000	0.000	1.000	1.000
SIZE	448	18.803	1.802	15.971	17.455	18.242	20.089	23.465
BTM	448	1.204	1.121	-0.268	0.404	0.892	1.596	4.786
LEV	448	0.572	0.250	0.061	0.373	0.593	0.746	1.105
ROA	448	-0.199	0.389	-1.892	-0.271	-0.053	0.021	0.243
SALESGROWTH	448	0.191	0.810	-0.813	-0.157	0.032	0.263	4.696
CFO	448	-0.046	0.181	-0.727	-0.092	-0.015	0.047	0.285
ACCRUALS	448	-0.033	0.142	-0.494	-0.086	0.004	0.039	0.291
*BIG*4	448	0.431	0.496	0.000	0.000	0.000	1.000	1.000
DISTRESS	448	2.011	21.916	-78.750	-2.743	8.606	15.502	27.740
WEAKNESS	448	0.036	0.186	0.000	0.000	0.000	0.000	1.000

Panel C: Variables in Abnormal Returns Tests (H2a)

Variable	N	*Mean*	*Std.Dev.*	$P1$	$P25$	*Median*	$P75$	$P99$
$CAR[-1,+1]$	1,536	-0.002	0.073	-0.210	-0.030	-0.005	0.023	0.262
$CAR[-2,+2]$	1,536	-0.002	0.094	-0.264	-0.042	-0.008	0.032	0.306
DET	1,536	0.292	0.455	0.000	0.000	0.000	1.000	1.000
$PENALTY$	1,536	0.573	1.004	0.000	0.000	0.000	1.000	3.000
$IFRS$	1,536	0.187	0.390	0.000	0.000	0.000	0.000	1.000
$SIZE$	1,536	18.731	1.583	15.971	17.613	18.360	19.509	23.496
BTM	1,536	1.163	0.941	-0.268	0.498	0.938	1.541	4.786
LEV	1,536	0.487	0.228	0.055	0.311	0.487	0.645	1.105

Panel D: Variables in Change of Earnings Response Coefficient Tests (H2b)

Variable	N	*Mean*	*Std.Dev.*	$P1$	$P25$	*Median*	$P75$	$P99$
$CAR[-1,+1]$	188	-0.014	0.082	-0.366	-0.028	-0.005	0.022	0.220
$CAR[-2,+2]$	188	-0.016	0.123	-0.483	-0.039	-0.007	0.032	0.331
UE	188	-0.024	2.536	-7.726	-0.075	0.003	0.124	3.467
$POST$	188	0.500	0.501	0.000	0.000	0.500	1.000	1.000
$SIZE$	188	19.002	2.031	15.762	17.372	18.588	20.242	24.615
BTM	188	0.890	1.269	-3.213	0.393	0.728	1.339	3.643
LEV	188	0.595	0.262	0.086	0.421	0.580	0.762	1.520

Table 4

Detection propensity per investigation: K-GAAP vs. IFRS.

This table reports the results of analyses pertaining to the logistic regression specified in equation (1). Marginal effects are computed at the mean value point of covariates. All variable descriptions are in Appendix A. Controls include year and industry fixed effects. z-statistics are computed with robust standard errors clustered by firm. ***, **, and * indicate significance at the two tailed 1%, 5%, and 10% levels, respectively.

Variable	Coefficient	z-statistic	Marginal Effect
Intercept	-12.002	6.37^{***}	
$IFRS$	10.269	17.01^{***}	0.750
$SIZE$	0.194	2.42^{**}	0.018
BTM	0.155	1.51	0.014
LEV	0.962	2.17^{**}	0.079
ROA	-0.667	-1.62	-0.061
$SALESGROWTH$	0.010	0.10	0.002
CFO	-1.104	-1.75^{*}	-0.090
$ACCRUALS$	-0.877	-0.88	-0.086
$BIG4$	-0.406	-2.09^{**}	-0.038
$DISTRESS$	-0.025	-3.33^{***}	-0.002
$WEAKNESS$	0.299	0.61	0.020
Fixed Effects		Industry, Year	
N		1,536	
Pseudo R^2		0.222	

Table 5

Enforced penalty on detected violations: K-GAAP vs. IFRS.

This table reports the estimates from an ordered logit analysis specified in equation (2). All variable descriptions are in appendix A. Controls include year and industry fixed effects. z-statistics are computed with robust standard errors clustered by firm. ***, **, and * indicate significance at the two tailed 1%, 5%, and 10% levels, respectively.

	(Preparer)			(Audit Firm)			(CPA)		
Variable	Coef.	z-stat.	Marginal Effect	Coef.	z-stat.	Marginal Effect	Coef.	z-stat.	Marginal Effect
Intercept1	-1.503	-0.44		-3.331	-0.88		0.071	0.02	
Intercept2	-0.455	-0.13		-1.994	-0.53		1.991	0.66	
IFRS	1.462	1.21	0.265	1.472	1.31	0.270	0.008	0.01	0.001
SIZE	0.036	0.20	0.007	0.134	0.67	0.025	-0.089	-0.55	-0.015
BTM	-0.146	-0.87	-0.027	-0.011	-0.05	-0.002	0.086	0.46	0.015
LEV	-0.098	-0.13	-0.018	0.469	0.56	0.086	0.888	1.14	0.153
ROA	-0.569	-0.76	-0.103	0.655	1.07	0.120	0.614	1.09	0.106
SALESGROWTH	0.126	0.78	0.023	0.320	1.78*	0.059	0.369	2.54**	0.064
CFO	-0.663	-0.63	-0.120	-0.485	-0.44	-0.089	-0.833	-0.76	-0.144
ACCRUALS	-2.542	1.49	-0.461	-1.697	-0.96	-0.311	-0.563	-0.35	-0.097
BIG4	0.210	0.57	0.038	-0.773	-1.89*	-0.142	-0.758	-1.80*	-0.131
DISTRESS	-0.009	-0.55	-0.002	-0.034	-2.57**	-0.006	-0.031	-2.74***	-0.005
WEAKNESS	-0.088	-0.13	-0.016	-1.130	-1.19	-0.207	-0.810	-0.80	-0.140
Fixed Effects	Industry, Year			Industry, Year			Industry, Year		
N	430			356			350		
Pesudo R^2	0.195			0.235			0.268		

Table 6

Market reaction to inspection reports.

Panel A presents the short-window abnormal returns for inspected firms detected with a violation of reporting standards. Panel B shows the short-window abnormal returns for inspected firms with no detections of violations. Panel C is a multivariate regression combining the two samples from Panel A and B. All variable descriptions are in Appendix A. Regressions include year and industry fixed effects. *t*-statistics are computed with robust standard errors clustered by firm. ***, **, and * indicate significance at the two tailed 1%, 5%, and 10% levels, respectively.

Panel A: Investigated firms detected with violations (treatment sample)

		Cumulative Size-Adjusted Returns		
	Event Window	K-GAAP (n = 342)	IFRS (n = 127)	Difference Test (K-GAAP vs. IFRS)
		Mean	Mean	t-test
Preparer Liability	$[-1,+1]$	-0.15%	-1.71%	
		(-0.34)	(-1.89)*	(1.54)
	$[-2,+2]$	-0.36%	-2.18%	
		(-0.60)	(-1.93)*	(1.42)
Audit Firm Liability	$[-1,+1]$	0.54%	-1.10%	
		(1.05)	(-2.03)**	(2.20)**
	$[-2,+2]$	0.29%	-1.43%	
		(0.43)	(-2.08)**	(1.71)*
CPA Liability	$[-1,+1]$	0.38%	-1.88%	
		(0.69)	(-2.00)**	(2.07)**
	$[-2,+2]$	0.01%	-2.26%	
		(0.01)	(-1.91)*	(1.68)*

Panel B: Investigated firms with no detections (control sample)

	Cumulative Size-Adjusted Returns					
Event Window	K-GAAP (n = 928)		IFRS (n = 165)		Difference Test (K-GAAP vs. IFRS)	
	Mean	Median	Mean	Median	t-test	z-stat
$[-1,+1]$	-0.12%	-0.42%	0.20%	-0.63%		
	(-0.60)		(-0.60)*		(-0.68)	(-0.18)
$[-2,+2]$	-0.03%	-0.43%	0.62%	-0.77%		
	(-0.10)		(1.25)		(-1.15)	(0.78)

Panel C: Market reaction multivariate analyses with controls (full sample)

Variables	$CAR[-1,+1]$		$CAR[-2,+2]$	
	Coef.	t-stat.	Coef.	t-stat.
Constant	-0.044	-1.28	-0.036	-1.25
$IFRS$	-0.053	-1.12	-0.050	-1.24
DET	-0.004	-0.48	0.005	0.50
$IFRS \times DET$	-0.021	-1.64^{*}	-0.021	-1.87^{*}
$SIZE$	0.003	1.69^{*}	0.002	1.60
BTM	0.003	1.65^{*}	0.003	1.28
LEV	0.001	0.13	-0.001	-0.15
Fixed Effects	Industry, Year		Industry, Year	
N	1,536		1,536	
R^2	0.037		0.036	

Panel D: Market reaction analyses with penalty controls (full sample)

	$CAR[-1,+1]$		$CAR[-2,+2]$	
Variable	Coef.	t-stat.	Coef.	t-stat.
Intercept	-0.043	-1.31	-0.046	-0.97
$IFRS$	-0.043	-0.94	-0.034	-0.78
$PENALTY$	-0.001	-0.23	-0.003	0.50
$IFRS \times PENALTY$	-0.013	-1.65^{*}	-0.014	-1.57
$SIZE$	0.003	1.68^{*}	0.002	0.96
BTM	0.003	1.49	0.002	0.81
LEV	0.002	0.18	-0.001	-0.41
Fixed Effects	Industry, Year		Industry, Year	
N	1,536		1,536	
Adj. R^2	0.038		0.034	

Table 7

Stock price responsiveness to earnings following GAAP violations.

This table presents the results from an OLS regression of size-adjusted five-day cumulative abnormal stock returns ($CAR[-2,+2]$) on unexpected earnings (UE), pre and post a detection event ($POST$), which is an indicator equal to one for inspected firms detected with a violation of reporting standards. All variable descriptions are in Appendix A. Both regressions using the K-GAAP and IFRS violation sample include industry and year fixed effects. t-statistics are computed with robust standard errors clustered by firm. ***, **, and * indicate significance at the two tailed 1%, 5%, and 10% levels, respectively.

	K-GAAP Violation		IFRS Violation	
Variable	Coef.	t-stat.	Coef.	t-stat.
Intercept	-0.151	-0.45	-0.217	-2.62^{***}
UE	0.531	1.99^{**}	0.142	1.61
$POST$	0.081	1.75^{*}	-0.001	-0.04
$SIZE$	0.006	0.44	0.014	2.50^{**}
BTM	0.028	0.71	-0.012	-1.64
LEV	-0.045	-0.35	-0.067	-1.56
$UE \times POST$	-0.014	-0.18	-0.066	-2.73^{***}
$UE \times SIZE$	-0.035	-2.01^{**}	-0.003	-0.98
$UE \times BTM$	0.008	0.15	-0.010	-1.05
$UE \times LEV$	0.080	0.73	-0.033	-0.66
Fixed Effects	Industry, Year		Industry, Year	
N	73		115	
R^2	0.188		0.182	

Table 8

Preparer vs. auditor enforcement risk comparison.

Panel A reports the results from analyses pertaining to the logistic regression specified in equation (1) separately for each the preparer, audit firm, and CPA involved. Panel B estimates the conditional likelihood of auditor's joint liability enforcement when their engagement issuing firm is detected with a violation of standards. Marginal effects are computed at the mean value point of covariates. Panel C reports the abnormal market reactions of equation (3) separately for each inspection reports disclosing a violation of the preparer, audit firm, and CPA separately. All variable descriptions are in Appendix A. Controls include year and industry fixed effects. z-statistics are computed with robust standard errors clustered by firm. ***, **, and * indicate significance at the two tailed 1%, 5%, and 10% levels, respectively.

Panel A: Enforcement risk change comparison (preparer, audit firm, and CPA)

	(Preparer)		(Audit Firm)		(CPA)	
Variable	Coef.	Z-stat.	Coef.	Z-stat.	Coef.	Z-stat.
Intercept	-12.012	-6.36***	-12.481	-6.14***	-11.697	-5.60***
IFRS	10.288	16.92***	10.830	17.52***	10.970	17.85***
SIZE	0.193	2.39**	0.212	2.36**	0.172	1.84*
BTM	0.150	1.45	0.159	1.38	0.181	1.55
LEV	0.981	2.20**	0.778	1.62	0.727	1.46
ROA	-0.655	-1.59	-0.026	-0.07	-0.070	-0.19
SALESGROWTH	0.012	0.12	0.000	0.00	-0.017	-0.16
CFO	-1.104	-1.76*	-0.438	-0.69	-0.668	-1.06
ACCRUALS	-0.860	-0.86	-0.841	-0.91	-0.367	-0.39
BIG4	-0.375	-1.93*	-0.484	-2.25**	-0.484	-2.18**
DISTRESS	0.313	0.64	-0.523	-0.98	-0.529	-0.97
WEAKNESS	-0.025	-3.37***	-0.031	-4.28***	-0.032	-4.35***
Test of Diff:	(Audit Firm vs. Preparer)		$t = 4.84^{***}$			
Test of Diff:	(CPA vs. Preparer)				$t = 7.65^{***}$	
Fixed Effects	Industry, Year		Industry, Year		Industry, Year	
N	1,536		1,536		1,536	
Pesudo R^2	0.221		0.196		0.199	

Panel B: Changes in auditor joint liability risk

Variable	Coefficient	z-statistic	Marginal Effect
Intercept	9.017	2.04**	
$IFRS$	8.665	10.73***	0.678
$SIZE$	0.321	1.26	0.017
BTM	−0.117	−0.67	0.012
LEV	−1.275	−1.43	0.056
ROA	0.838	1.46	−0.004
$SALESGROWTH$	−0.051	−0.25	0.001
CFO	1.730	1.48	−0.030
$ACCRUALS$	1.195	0.67	−0.068
$BIG4$	−0.696	−1.64*	−0.038
$DISTRESS$	−0.033	−2.27**	−0.003
$WEAKNESS$	−1.166	−1.89*	−0.040
Fixed Effects		Industry, Year	
N		448	
Pseudo R^2		0.194	

Panel C: Comparison of market reaction to inspection reports (preparer, audit firm, and CPA liability reports)

Cumulative Size-Adjusted Returns ($CAR[-1,+1]$)						
	Preparer Liability Report		Audit Firm Liability Report		CPA Liability Report	
Variable	Coef.	t-stat.	Coef.	t-stat.	Coef.	t-stat.
Intercept	-0.046	-1.35	-0.049	-1.50	-0.051	-1.60
$IFRS$	-0.047	-1.01	-0.041	-0.87	-0.047	-0.92
$PENALTY$	-0.001	-0.31	0.002	0.34	0.003	0.51
$IFRS \times PENALTY$	-0.010	-1.51*	-0.014	-1.92*	-0.015	-1.70*
$SIZE$	0.003	1.72*	0.003	1.77*	0.003	1.88*
BTM	0.003	1.56*	0.003	1.54	0.003	1.56*
LEV	0.002	0.15	-0.000	-0.04	-0.001	-0.15
Test of Diff (Audit Firm vs. Preparer)			t = -1.28			
Test of Diff (CPA vs. Preparer)					t = -0.86	
Fixed Effects	Industry, Year		Industry, Year		Industry, Year	
N	1,536		1,536		1,536	
R^2	0.037		0.038		0.037	