University of Kentucky
UKnowledge

2016

FIRMS' NON-RELIANCE JUDGMENT, RESTATEMENT VENUE CHOICE, AND LITIGATION RISK

Keunho Philip Chung
University of Kentucky, philip.chung@uky.edu
Digital Object Identifier: http://dx.doi.org/10.13023/ETD.2016.181

Right click to open a feedback form in a new tab to let us know how this document benefits you.

Recommended Citation

STUDENT AGREEMENT:

I represent that my thesis or dissertation and abstract are my original work. Proper attribution has been given to all outside sources. I understand that I am solely responsible for obtaining any needed copyright permissions. I have obtained needed written permission statement(s) from the owner(s) of each third-party copyrighted matter to be included in my work, allowing electronic distribution (if such use is not permitted by the fair use doctrine) which will be submitted to UKnowledge as Additional File.

I hereby grant to The University of Kentucky and its agents the irrevocable, non-exclusive, and royalty-free license to archive and make accessible my work in whole or in part in all forms of media, now or hereafter known. I agree that the document mentioned above may be made available immediately for worldwide access unless an embargo applies.

I retain all other ownership rights to the copyright of my work. I also retain the right to use in future works (such as articles or books) all or part of my work. I understand that I am free to register the copyright to my work.

REVIEW, APPROVAL AND ACCEPTANCE

The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Director of Graduate Studies (DGS), on behalf of the program; we verify that this is the final, approved version of the student's thesis including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Keunho Philip Chung, Student

Dr. Hong Xie, Major Professor

Dr. Kenneth Troske, Director of Graduate Studies

FIRMS' NON-RELIANCE JUDGMENT, RESTATEMENT VENUE CHOICE, AND
LITIGATION RISK

DISSERTATION

A dissertation submitted in partial fulfillment of
requirements for the degree of Doctor of Philosophy in the
College of Business and Economics
at the University of Kentucky

By
Keunho Philip Chung

Lexington, Kentucky

Director: Dr. Hong Xie, Professor of Accounting Lexington, Kentucky

2016

ABSTRACT OF DISSERTATION

FIRMS' NON-RELIANCE JUDGMENT, RESTATEMENT VENUE CHOICE, AND
LITIGATION RISK

This paper examines the determinants of firms' non-reliance judgment and the effect of restatements disclosure venue choice on future litigation risk. The Securities and Exchange Commission (SEC) requires firms to disclose any error that will undermine investors' reliance on previously issued financial statements in Item 4.02 of Form 8-K starting on August 23, 2004. The requirements for non-reliance judgments lack clear guidelines; raising concerns that firms are cloaking errors and mistakes through opaque disclosure venues instead of the more prominent Form 8-K.

This paper is the first to investigate the quantitative and qualitative criteria that firms use for non-reliance judgments and estimate the likelihood of specific disclosure venue choice. Applying this estimation into securities class-action litigation setting with controls for restatement characteristics and potential self-selection biases, I find that a more prominent restatement disclosure venue is associated with higher future litigation risk.

This finding provides a plausible explanation for the current popularity of so-called 'stealth restatements.' These findings are robust to the exclusion of a transition period of the new regulation, firms with multiple restatements, and dismissed lawsuits.

KEYWORDS: Non-reliance Judgment, 4.02-8K Restatements, Materiality, Litigation

Keunho Philip Chung
Author

4/25/2016
Date

FIRMS' NON-RELIANCE JUDGMENT, RESTATEMENT VENUE CHOICE, AND
LITIGATION RISK

By

Keunho Philip Chung

<table>
<tr><td>Dr. Hong Xie</td></tr>
<tr><td>Director of Dissertation</td></tr>
<tr><td>Dr. Kenneth Troske</td></tr>
<tr><td>Director of Graduate Studies</td></tr>
<tr><td>4/25/2016</td></tr>
<tr><td>Date</td></tr>
</table>

DEDICATION

To my wife, Hyunjoo Lee,

to my daughters, Yunseo and Yuna,

and to my parents, late Jae-Ik Chung and Ki-Jo Lee.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter 1: INTRODUCTION

In response to the "real time issuer disclosure" mandate of Section 409 of the Sarbanes-Oxley Act 2002, the SEC issued the Final rule about additional Form 8-K disclosure requirements and acceleration of filing date (the Final rule) in August 2004. The Final rule requires a firm to disclose any error in Item 4.02 of Form 8-K within four business days of a triggering event, defined as the date when the firm or its auditor concludes that the previously issued financial statements "no longer should be relied upon because of errors in such financial statements" (SEC 2004a). That is, if a restatement renders the firm's previously issued financial statements unreliable, the firm must disclose the restatement under Item 4.02 of Form 8-K (hereafter, 4.02-8K restatements). 4.02-8K restatement disclosure is a new requirement introduced by the SEC with the intent of enhancing market efficiency by improving the prominence and timeliness of disclosures of "unquestionably or presumptively material events that must be disclosed currently" (SEC 2004a).

However, the absence of bright-line guidance to the non-reliance judgment results in diverse interpretations and applications of this disclosure regulation, raising the concern that firms are applying the disclosure regulation opportunistically to keep their errors and mistakes "under the regulatory radar" (Myers et al. 2013).[1] Scholz (2014) reports that firms are increasingly restating earnings directly in periodic filings (10-K or 10-Q) or amended filings (10-K/A or 10-Q/A) without filing Form 8-K first. I term these kinds of restatements as non 4.02-8K restatements.[2] Specifically, Scholz (2014) finds that the percentage of non

---

[1] Myers et al. (2013) argue that "some firms continue to disclosure severe restatements in the most obscure disclosure venue," i.e., in regular periodic filings to the SEC (10-K or 10-Q).

[2] Such restatements are also known as "stealth restatements," "revision restatements," or "non 4.02 restatements."

4.02-8K restatements, i.e., restatements made directly in periodic filings or amended filings without filing Form 8-K first, increases monotonically from 39% in 2005 to 65% in 2012 (see also AuditAnalytics 2014) since the adoption of the Final rule in 2004. This seems to imply that firms choose restatement disclosure venues opportunistically.

However, before making any inference about the firms' behaviors or incentives, we must understand the firms' non-reliance judgment, as firms are not required to use 4.02-8K restatement if they conclude that errors in the previously issued financial statements do not undermine investors' reliance on these financial statements (PWC 2014; EY 2015). Thus, the frequency analysis of non 4.02-8K restatements without the consideration of firms' non-reliance judgments criteria might induce erroneous conclusion about the relation between firms' choice of restatement disclosure venue and the disclosure quality.

This paper contributes to the materiality and restatement literatures in several ways. First, this paper is the first to provide empirical evidence regarding the non-reliance judgment criteria that firms are using to choose a restatement disclosure venue. I adopt quantitative, qualitative, and contextual consideration variables from the SEC guideline and prior materiality literature, and provide empirical evidence about the determinants of the non-reliance judgment.

Second, this paper clarifies key concepts sometimes misused in the restatements literature. As Scholz (2014) points out, 4.02-8K restatements after the Final rule are not directly comparable with 8-K restatements announced before August 2004, although both are announced in Form 8-K. That is because 8-K restatements filed before the Final rule are based on firms' voluntary disclosure incentives, while 4.02-8K restatements after the Final rule are mandatory when a non-reliance judgment is made (Lerman and Livnat 2010).

However, prior restatements research does not differentiate between these two different disclosure regimes, and commonly includes data from both periods in one sample. I only use 4.02-8K restatements filed after Aug. 2004 to remove any internal validity concerns (Heitzman, Wasley, and Zimmerman 2010). Further, I also provide an explanation and evidence regarding how non-reliance judgments are similar but not equal to materiality judgments.

Third, this paper extends the scope of the materiality judgment literature. Many empirical studies have evaluated the nature of materiality and tested materiality thresholds (Messier et al. 2005). However, these studies mainly focus on specific accounts (e.g., Gleason and Mills 2002; Liu and Mittelstaedt 2002; Acito et al. 2009) or accounting rule changes (e.g., Keune and Johnstone 2012).[3] Notwithstanding the significant contribution of these studies, there exists little evidence that the findings in these studies apply to other accounts or settings. Given the small samples employed in earlier studies, external validity concerns are possibly nontrivial.[4] The accounting restatements database of the Audit Analytics encompasses diverse accounting issues such as errors, irregularities, and misapplications of GAAP; this comprehensive dataset allows me to test whether the prior findings in materiality studies can be applied to other settings. I adopt the materiality thresholds benchmarks and other contextual considerations and show that the quantitative and qualitative considerations within the materiality literature hold in more generalized settings.

---

[3] Gleason and Mills (2002), Liu and Mittelstaedt (2002), Acito et al. (2009), and Keune and Johnstone (2012) investigate materiality issue related to contingent tax liability, retiree health care costs under SFAS No. 81, operating lease, and SAB 108, respectively.
[4] One exception is Acito et al. (2015), which examines the SEC comment letters about firms' materiality judgment and proposes a simplified model for managers' materiality judgment.

Finally, I provide evidence that disclosure prominence increases firms' future securities class-action litigation risk after controlling for the self-selection bias of firms to choose less prominent disclosure venue to lower the likelihood of litigation risk without regard to non-reliance judgment. Files et al. (2009) observe positive relations between conspicuous press releases about earnings restatements and future litigation risk. Drawing on restatements database and non-reliance determinants estimation, I generalize their findings in two ways. First, I broaden the scope of disclosure venue from the press release to the main restatement disclosure venues such as 4.02-8K, periodic SEC filings (e.g., 10-K and 10-Q), and amended SEC filings (e.g., 10-K/A, 10-Q/A). Second, I apply the determinants of non-reliance judgments to estimate firms' likelihood to choose 4.02-8K restatements at given conditions. This equation provides a theoretical basis for the first part of the Heckman two-stage model, which is widely adopted to control for the self-selection bias in econometric models. Self-selection bias could arise when firms make disclosure choice strategically in anticipation of future litigation risk. This potential bias could result in biased estimation in determining the disclosure choice effect on litigation risk.

The next section discusses the related literature and develops my research question and hypothesis. Section III explains the data and research design, and the following section presents the analysis results. The last section provides summary and concluding remarks.

4

Chapter 2: LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Error Correction and its Disclosure

Any accounting error in prior financial statements resulting from the mathematical mistakes, GAAP misapplication, or ignorance of facts should be corrected and reported by restating the prior statements (FASB ASC 250-45-23). However, the restatement process is diverse depending on the different level of materiality of errors.

If the error is deemed immaterial by management, the error needs not be corrected at all (FASB ASC 105-10-05-6; Acito et al. 2015), and if the error is material, then the error correction should be disclosed in amended (e.g., 10-K/A) or periodic (e.g., 10-K) SEC filings (PWC 2014; EY 2015).[5] For instance, Acito et al. (2009) test the determinants of materiality judgment using 250 operating lease accounting errors corrected by U.S. firms during 2004 to 2006. They categorize the error correction methods into formal restatements and catch-up adjustments according to the materiality of errors. [6]

Before the Final rule, financial statements users can only identify a firm's material accounting error after the firm discloses it in amended or periodic filings, with the exception of when a firm uses the voluntary Form 8-K disclosure or press release about the error identified.[7] However, after the SEC Final rule about the new form 8-K disclosure, firms must decide whether the past financial statements which contain material errors

---

[5] The restatement through periodic filings is allowed by SEC for the error that is immaterial to each of prior periods but becomes material when the cumulative error is corrected in current period (SAB 108; Scholz 2014). This type of restatement is known as "little r restatements" (EY 2015).

[6] "Catch-up" adjustment is also known as "out-of-period" adjustment, which is a way to correct prior immaterial errors by changing current financial statement number. See Acito et al. (2015) for a specific example of catch-up adjustment.

[7] Before the Final rule, Form 8-K was required only for six specific events such as a change in control of the company and the company's bankruptcy, and three broad events. The voluntary 8-K disclosure of accounting errors is based on this broadly defined event which companies deem to be of importance to their shareholder (SEC 2002; Lerman and Livnat 2010).

should be relied upon, and disclosure them using the Item 4.02 in Form 8-K within four business days after this decision (SEC 2004a).

This Item 4.02 in Form 8-K requirements is mandatory and needs to be filed separately even when the triggering event happens within four business days before other SEC filing (SEC 2004b).[8] Because of this significant change in disclosure regulation, Scholz (2014) categorizes restatements into 4.02 restatements for the restatements disclosed with preceding Item 4.02 Form 8-K filing and non 4.02 restatements for restatements without it after the Final rule.[9]

This review of SEC regulations and literature indicates that a material error requiring the additional disclosure of a non-reliance judgment is different from a material error that does not.

2.2 Materiality and Non-reliance Judgment

SEC SAB No. 99 (1999) defines a matter as *material* "if there is a substantial likelihood that a reasonable person would consider it important" and emphasizes the simultaneous use of quantitative and qualitative considerations for the materiality judgment.[10] However, no clear threshold exists for the determination of a distinction between immaterial and material issues. In practice, however, five percent of income threshold is widely acknowledged as a 'rule of thumb' benchmark for the materiality threshold (Nelson et al. 2005; Acito et al. 2009)

---

[8] "All Item 4.01 and Item 4.02 events must be reported on Form 8-K" (SEC 2004b).
[9] The Audit Analytics uses the term of reissuance restatements for 4.02-8K restatements and revision restatements for non 4.02-8K restatements (Audit Analytics 2015). Following Scholz (2014), I use the term of non 4.02-8K restatements for all restatements disclosed without the preceding Item 4.02 in Form 8-K.
[10] U.S. supreme court regards an item as "material if there is a substantial likelihood that the disclosure of the omitted fact *would have been viewed* by the reasonable investor as having significantly altered the total mix of information made available" (Heitzman et al. 2010).

Acito et al. (2009) provide anecdotal evidence about difference between material and immaterial error using the 5% of earnings benchmark. They show that most catch-up adjustments take place at the magnitude less than 5% of annualized quarterly net income, while the frequency distribution of restatements is widely spread around 5% benchmark, suggesting that qualitative considerations plays an important role for materiality judgment as well.

If non 4.02-8K restatements are employed only when identified errors are immaterial, then I should find a similar distribution to catch-up adjustments when I apply the same criteria in my sample. Results in Figure 1 show that the frequency distributions of non 4.02-8K restatements are similar to that of 4.02-8K restatements, providing an anecdotal evidence that non 4.02-8K restatements are also related to materiality. This suggests that additional criteria are necessary to disentangle errors requiring non-reliance judgment from other material errors.

FIGURE 1
Frequency Distribution of Relative Misstated Amount

Panel A: Non 4.02-8K restatements
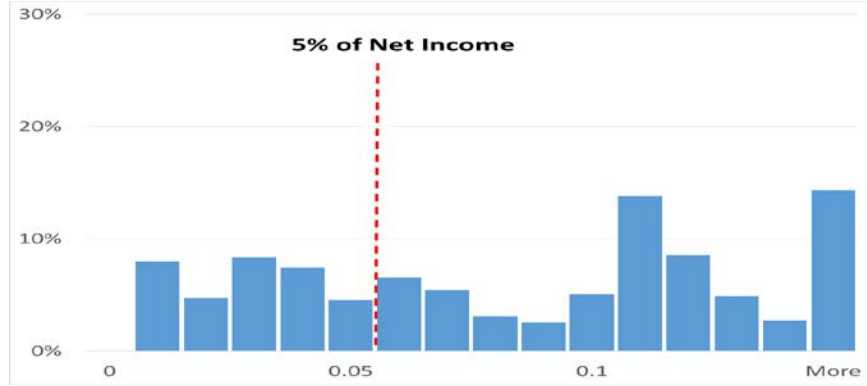
Panel B: 4.02-8K restatements
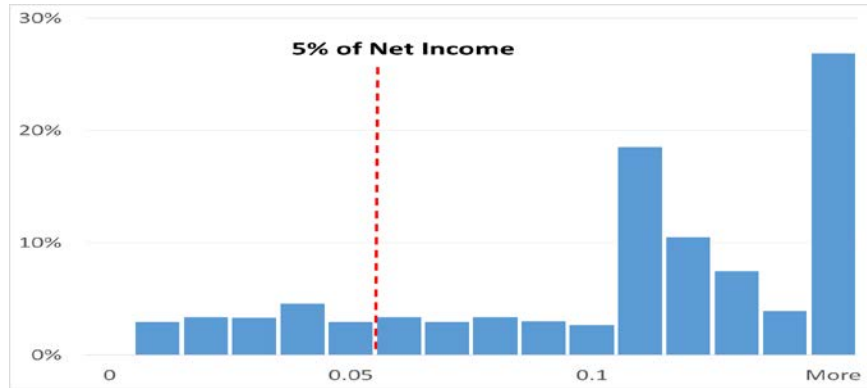
Panel C: 4.02-8K restatements with SEVERITY ≥ 3
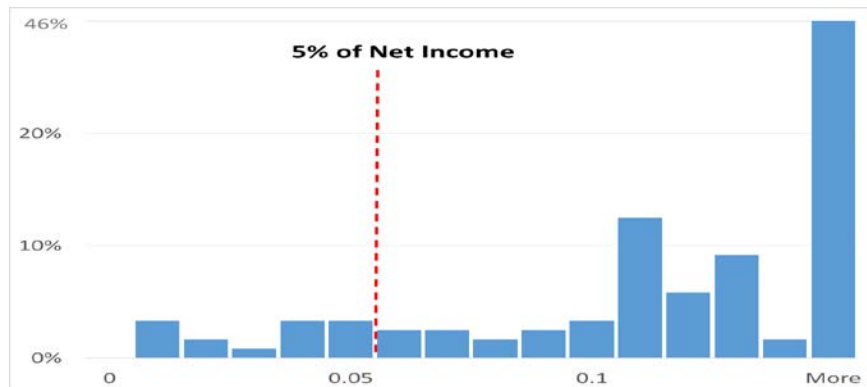
This figure shows the frequency of relative misstated amount over net income (|RS_ANI|). X-axis is the relative misstated amount and Y-axis is the frequency of each bin. Panel C has the same Y scale as A and B to facilitate comparison, except for maximum value.

The SEC amends Form 8-K disclosure requirements in 2004 "to provide investors with better and faster disclosure of important corporate events" by expanding the number of Form 8-K items and by shortening the filing deadline for most items to four business days after a triggering event. Specifically, the SEC clarifies the purpose of 2004 amendment as follows;

> "The limited number of Form 8-K disclosure items permitted a public company to delay disclosure of many significant events until the due date for its next periodic report. During such a delay, the market was unable to assimilate such undisclosed information into the value of a company's securities. The revisions that we adopt today will benefit markets *by increasing the number of unquestionably or presumptively material events* that must be disclosed currently" (emphasize added) (SEC 2004a).

The SEC clears up the unique characteristics of material events that should be reported in Form 8-K in its 2006 revision of Form 8-K. In response to the significant increase of executive compensation disclosure under Item 1.01, the SEC decides to limit the scope of executive compensation disclosure and only include compensation disclosure that is unquestionably and presumptively material to investors.[11]

My review of the purpose of the Final rule leads to the conclusion that SEC treats material errors and unquestionably material errors differently and the anecdotal evidence in Figure 1 implies that non-reliance judgement is the materiality judgement required for the unquestionably material events, and has positive relation with the severity of errors.[12]

---

[11] "…, we believe that much of the disclosure regarding employment compensation matters required in real-time under the Form 8-K requirements is viewed by investors as material. However, we also believe it is appropriate to restore a more balanced approach to this aspect of Form 8-K, an approach which is designed to elicit unquestionably or presumptively material information on a real-time basis, but seeks to limit Form 8-K required disclosure of information below that threshold" (SEC 2006b).

[12] Scholz (2014) also posits that "4.02-8K restatements are generally more serious than other restatements."

Myers et al. (2013) and Plumlee and Yohn (2014) are similar to this paper in that they examine the determinants of restatements disclosure venue choices using the same dependent variable and comparable independent variables such as restatements characteristics. However, the purpose and results of my study are quite different from theirs in several aspects. First, their research focus is on contextual and external factors that might have effect on firms' Form 8-K disclose choice without regard to their non-reliance judgment. In contrast, my main focus is on identifying determinants of firms' non-reliance judgment for 4.02-8K restatements. Second, they do not differentiate voluntary disclosure regime from mandatory disclosure regime and use restatements filed in Form 8-K before and after the Final rule for their main analysis.[13] Although they account for this difference by adopting an indicator variable for restatement announced after the Final rule and performing subsample analysis, the tests about voluntary disclosure choice might lead to incorrect inference under the different disclosure regimes (Heitzman et al. 2010). I use restatements data after the SEC Final rule so that I can rule out any potential internal validity issue. Third, both papers test the effect of prominent disclosure on the stock market response. In contrast, my research investigates the effect of prominent disclosure on the future litigation risk.

2.3 Non-Reliance Judgment Considerations

As just reviewed before, the non-reliance judgment about the errors in prior financial statements is closely related to the materiality judgement. Therefore, I use prior

---

[13] Myers et al. (2013) use restatements announced from Jan. 1. 2002 to Mar. 31. 2008. Plumbee and Yohn (2014) use restatements disclosed between 2003 and 2006. The 8K disclosures in these studies before Aug. 2004 are voluntary and unrelated to non-reliance judgment.

literature about materiality (e.g., Acito et al. 2009) as a source of theory and empirical criteria in my investigation of non-reliance judgments. In addition, as suggested by a SEC staff member, I adopt SEC SAB 99 as a guide for this study of non-reliance judgments.[14]

I divide non-reliance judgment considerations into five categories: quantitative considerations, qualitative considerations part 1 - net income trends, qualitative considerations part 2 - restatements characteristics, contextual considerations related to the choice of restatement disclosure venue other than quantitative and qualitative considerations, and other control variables pertinent to firms' general disclosure choice. This comprehensive set of categories is expected to capture the relevant criteria that firms use to make non-reliance judgment.

Quantitative factors are one of the most intuitive and widely-adopted materiality considerations. The simple rationale of this quantitative consideration is that the relative size of an error determines whether the error is material or not (Acito et al. 2009). Prior archival studies find that firms often use income magnitude benchmarks, but in some cases, firms may employ balance sheet information as well (Messier et al. 2005). [15] To examine all alternative methods, I adopt seven different benchmarks taken from the income statement and balance sheet, and evaluate the individual and composite effect of quantitative factors that firms are considering when they make non-reliance judgments.

Following SAB 99, I also use income trend in the restatement announcement year as a qualitative consideration. In many cases, the income adjustment effect of restatements

---

[14] "An item 4.02 8-K is not automatically required for every error in the financial statements. It would depend on a SAB 99 quantitative and qualitative analysis" (Dorsey 2006)

[15] Prior restatements studies use just one benchmark to scale the magnitude of an error. For example, Hennes et al (2014) use total assets to scale the magnitude of errors, and Myers et al. (2013) scale the misstated amount by net income at the beginning of year in which restatement is announced.

does not have a direct effect on the restatements announcement period income. However, the restatement announcement is closely related to current period stock performance, implying that firms that usually care for current period stock performance may consider the income trend of the current period rather than prior periods when making a disclosure venue choice. Similarly, prior literature (e.g., Acito et al. 2009) also uses the current period income as a materiality decision benchmark. The income adjustment effect of restatements on meeting or beating market consensus is not included as one of the qualitative considerations because the current period analysts' forecasts are not affected by the prior years' income number change.

Hennes et al. (2008) emphasize that it is important to distinguish accounting irregularities from technical errors in restatements research. I also conjecture that individual and combined characteristics of restatements have differential effect on firms' non-reliance judgments, and that the more severe restatements are more likely to be associated with non-reliance judgments. Following Hennes et al (2014), I adopt five individual restatement characteristics and a composite restatement severity index as secondary qualitative considerations to reflect the numerous aspects of a restatement.

In addition to the quantitative and qualitative factors mentioned in SAB 99, other contextual factors can have an effect on firms' restatement venue choice. For example, Myers et al. (2013) argue that the number of analysts following the firm, the proportion of institutional investors holding the firms' equity, and industry-specific accounting practices toward 8-K disclosure choices are significantly related to firms' disclosure choice. Additionally, Files et al. (2009) posit that the number of management forecasts is associated with firms' disclosure prominence choices. Finally, Acito et al. (2009) observe

that firms' having high earnings quality and litigation risk might use lower thresholds in materiality decisions. Based on the prior literature, I conjecture that external monitoring influences, external financing motivations, accounting quality of individual firms, industry norms for 4.02-8K restatements, and litigation risk within same industry might affect the likelihood of 4.02-8K restatements disclosure venue choice. Based upon my literature reviews, I prepare my research question (RQ1) about firms' non-reliance judgment criteria as follows;

RQ1: What quantitative, qualitative, and contextual criteria do firms consider when making non-reliance judgment about the errors in their past financial statements?

2.4 Disclosure Prominence and Litigation Risk

Firms' voluntary disclosures and their effect on litigation draw intense attention due to the detrimental consequences of litigation on firms' operational activities and reputation (Field et al. 2005).

Prior disclosure research focuses on understanding whether prompt disclosure of bad news increases or decreases the likelihood of litigation (Skinner 1997). To answer this question, Field et al. (2005) employ a simultaneous equation model, and provide empirical evidence that a preemptive disclosure of bad earnings news lowers future litigation risk after controlling for the endogeneity of disclosure choice and dismissed suits. Additionally, Donelson et al. (2012) confirms this negative relation between voluntary disclosure and litigation risk using analysts' earnings forecast consensus as a proxy for the timely revelation of future bad earnings news.

However, these studies have some limitations. First, the prior studies focus only on the effect of negative earnings surprise on future litigation risk. For this reason, Field et al. (2005) and Donelson et al. (2012) delete lawsuits related to the accounting irregularities such as GAAP violations from their samples. Second, these studies leave out any potential effect of firms' differential disclosure venue choice on litigation risk. For example, Field et al. (2005) posit that they do not expect any relation between disclosure choice and litigation risk when lawsuits are related to accounting irregularities. Third, prior disclosure studies use the management earnings forecast and analyst earnings forecast(s) as a proxy for firms disclosure choice. These research design choices collectively reduce the sample size significantly; compared with the number of lawsuits reported in the Securities Class Action Clearinghouse database, Field et al. (2005) and Donelson et al. (2012) only account for 8.2% and 17.9% of total lawsuits filed during the respective sample period.[16]

Another stream of accounting literature about litigation risk is related to the effect of disclosure prominence. Files et al. (2009) find evidence that a prominent press release that mentions the restatement in its headline has a higher chance of future class-action lawsuits than the less prominent press release that remarks the restatement in body or in footnote. They support their empirical findings with "limited attention theory," which predicts a less severe market response and thus lower chance of plaintiffs' attention for a less prominent press release relative to a prominent one. They also provide anecdotal evidence that news clipping functions inside class action law firms makes it hard for firms' restatement news reported in headlines go unnoticed.

---

[16] The number of firms sued in my sample is 772, which is 47.7% of the total lawsuits in the Securities Class Action Clearinghouse database reported from Aug. 23. 2004 to Dec. 31. 2013.

I extend the argument advanced by Files et al (2009) and generalize their findings using a comprehensive restatements sample and diverse disclosure venues. Specifically, I conjecture that the prominent disclosure venue such as 4.02-8K restatement, all others being equal, will have higher likelihood of future litigation risk compared to less notable disclosure venues such as periodic or amended restatements (non 4.02-8K restatements). Therefore, my hypothesis (H1) about the association between prominence of disclosure and litigation risk is as follows in alternative form:

H1: The prominence of restatement disclosure is positively associated with the likelihood of future securities class action lawsuits risk.

Chapter 3: DATA AND RESEARCH DESIGN

3.1 Sample

I obtain an initial sample of 10,406 accounting restatements from the Audit Analytics database announced between Aug. 2004 and Dec. 2013.[17] 1,553 restatements observations (14.9%) are excluded because these restatements are first disclosed in forms other than Press release, 8-K, 8-K/A, 10-K, 10-K/A, 10-Q, or 10-Q/A.[18] Restatements filed by firms not covered by Compustat and CRSP are also eliminated.

The disclosure venue data in the Audit Analytics is related to the initial detection of errors, not the final restatement filings. For example, it is possible that a firm voluntarily discloses the discovery of errors using Item 8.01 (Other events) in Form 8-K, but later the firm corrects the error in its periodic filing. In this case, the Audit Analytics record 8-K for this restatement disclosure venue (i.e., form_fkey=8-K in the Audit Analytics). Therefore, to answer my research question of this paper, restatements first disclosed by Press release and 8-K need to be verified whether the firms file Item 4.02 in Form 8-K after their initial disclosure of error. This manual examination eliminates other 208 restatements. Accounting data availability requirement deletes additional 477 restatements. Panel A in Table 1 outlines my sample selection process.

Table 1, Panel B presents industry distribution of restatements disclosure firms, with high concentrations in the Manufacturing (36.7%), Services (17.8%), and Finance, Insurance, & Real Estate (17.2%). Panel C finds the decreasing number of restatement

---

[17] The Audit Analytics database defines restatements as "a revision of previously filed financial statements as a result of an error, fraud or GAAP misapplication." Based on this definition, the Audit Analytics excludes restatements related to accounting principles changes, estimation changes, and subsequent filings of the same accounting issue.

[18] Examples of other forms include 20-F, 6-K, S-1, and NT 10-K or NT 10-Q. Form 20-F and 6-K are filed by foreign companies. Form S-1 is the initial registration form. And NT 10-K(Q) is required when firms are not able to file 10-K(Q) in time.

disclosures and the decreasing proportion of 4.02-8K restatements. The proportion of 4.02-8K restatements shrinks from 75.8% in 2005 to 24.2% in 2013, consistent with concerns that more firms are evading from the Form 8-K disclosure requirements.

TABLE 1
Sample

Panel A: Sampling Procedure

	Observations
Restatements reported in Audit Analytics during Aug. 2004-Dec. 2013	10,406
After removing	
Restatements in other forms than 8-K, 10-K(/A), 10-Q(/A)	8,853
Firms not covered by COMPUSTAT	6,199
Firms not covered by CRSP	4,116
8-K restatements not using Item 4.02 and missing required data [a]	3,431

Panel B: Sample Frequency by Industry

Industry Title	SIC code	Frequency	%	Cumulative %
Agriculture, Forestry & Fishing	01-09	6	0.2%	0.2%
Mining	10-14	239	7.0%	7.1%
Construction	15-17	38	1.1%	8.3%
Manufacturing	20-39	1,258	36.7%	44.9%
Transportation, Communications, Electric etc.	40-49	307	9.0%	53.9%
Wholesale Trade	50-51	103	3.0%	56.9%
Retail Trade	52-59	279	8.1%	65.0%
Finance, Insurance & Real Estate	60-67	589	17.2%	82.2%
Services	70-89	610	17.8%	100.0%
Total		3,429 [b]	100.0%	

Panel C: Sample Frequency by Year and by Restatement Disclosure Venue

Year	Periodic		Amended		4.02-8K	Total	4.02-8K/Total
	10K	10Q	10K/A	10Q/A			
2004 [c]	10	10	6	11	101	138	73.2%
2005	55	58	14	23	470	620	75.8%
2006	65	51	28	61	370	575	64.3%
2007	47	35	39	45	256	422	60.7%
2008	46	31	33	29	158	297	53.2%
2009	32	16	35	17	117	217	53.9%
2010	62	9	56	17	99	243	40.7%
2011	68	10	98	8	86	270	31.9%
2012	111	7	120	8	73	319	22.9%
2013	104	8	132	6	80	330	24.2%
Total	600	235	561	225	1,810	3,431	52.8%

[a] The sample size is varying depending on the different analysis and regressions. [b] Two restatements have no SIC information. [c] 2004 data includes restatements announced after the SEC Final rule (Aug. 23rd 2004).

3.2 Non-Reliance Judgment Criteria

Following Acito et al. (2009, 2015) and SAB 99 guideline, I construct qualitative, quantitative, and contextual considerations categories that firms are likely to use to make non-reliance judgments. First, I proxy for quantitative considerations using seven financial benchmarks as denominators of the absolute value of the misstated amount ($|RS\_/|$). Specifically, annual net income ($|RS\_ANI|$), annualized three-year net income ($|RS\_AQNI|$), normalized quarterly net income ($|RS\_NQNI|$), annualized 12-quarter net income ($|RS\_N3QNI|$), annual sales ($|RS\_ASALES|$), equity ($|RS\_EQUITY|$), and total assets ($|RS\_ASSETS|$) are used to account for the quantitative factors in non-reliance judgment. I expect each of the seven benchmarks to have positive effect on the non-reliance judgment. Appendix A provides detailed explanation about operationalization of each measure.

Second, qualitative considerations part 1 (QUALITATIVE1) is mainly measured by the association of the misstated amount with current net income trend. Specifically, I adopt benchmarks measuring whether the restatements are associated with annual or quarterly net income trend change (TREND_A, TREND_Q), annual or quarterly loss at the end of period (LOSS_A, LOSS_Q), and positive effect on net income in the misstated period (INCREASE). Because the effect of restatements on these variables is indirect, I have no prior prediction about the coefficient estimates.

Third, qualitative considerations part 2 (QUALITATIVE2) is related to restatements characteristics. Following prior research (Myers et al. 2013; Hennes et al. 2014), I use six variables to measure the characteristics and severity of restatements: restatements related to fraud (FRAUD) and SEC investigation (SEC), the number of issues

involved in the restatements (NUMBER), restatements related to the one of the core accounts such as revenue, expense, and cost of goods sold (CORE), the misstated period (PERIOD), and a composite index variable which has a value from zero to five depending on the severity of restatements (SEVERITY). Although the five individual variables and composite index variable are highly correlated, variance inflation factors (VIFs) in the OLS regression are well below the 10-cutoff level. I therefore include all six control variables in my analysis.[19] I expect a positive effect between all six variables on the non-reliance judgment.

Fourth, contextual considerations variables are included to account for the individual firms' incentives to use different disclosure venues due to unique situational factors. These factors include whether firms use Big 4 auditing firms (AUDITOR), whether accounting quality is high (QUALITY), whether the industry accounting practices about 8-K disclosure choice is different (PRACTICES), whether an auditor is changed after the misstated period (AUDITOR_CHG), whether firms belong to high litigation risk industry (LITIGATION_RISK), whether firms issue debts or stocks before or after the restatements (DEBT_ISSUE, STOCK_ISSUE), whether firms are under debt or stock market monitoring system (DEBT_MONITER, STOCK_MONITER).

Finally, following disclosure and materiality literature (e.g., Field et al. 2005; Acito et al. 2009; Keune and Johnstone 2012), I include additional control variables that might affect firms' non-reliance judgments and disclosure behaviors; financial distress (LOSS), growth opportunity (GROWTH), and information asymmetry (SIZE). I provide no specific prediction for control variables. In addition, I also control for the effect of firms that restates

---

[19] The VIF value for SEVERITY and CORE are 3.59 and 2.11, respectively.

their financial statements repetitively (REPEAT). To control for the repetitive firm appearance in my sample, I also cluster standard errors at the firm level for each regression. Moreover, I perform sensitivity test after excluding the second and subsequent restatements filed by the same firms.

3.3 Litigation Risk

The likelihood of securities class-action litigation depends foremost on the magnitude of stock market response and stock turnover rate (Field et al. 2005). The intuition behind this is that more negative stock market responses is likely to make the convincing case for stockholders' damage. In addition, the more volatile stock turnover makes the total recoverable damages larger, generating strong incentives for law firms to file a lawsuit.

Following Files et al. (2009), I adopt the current period return (3DAY_RETURN), prior period return (PRIOR_RETURN), post period stock response (PSOT_RETURN), and the historical share turnover rate (SHARE_TURN) to capture comprehensive future litigation risk in response to the restatement announcements. In addition, I add the net income amount affected by restatements for all periods and scale it by annualized 12-quarter net income (|RS_N3QNI|) to capture the severance of a restatement. Financial industry dummies (FINANCIAL) are included along with other control variables because financial firms are expected to suffer less negative stock response to bad news (Files et al. 2009).

3.4 Model Specification for Research Question

I examine my research question by estimating logit regression in which the dependent variable is an indicator variable that equals one if firms make non-reliance judgment and file the identified event(s) in Item 4.02 Form 8-K, and zero if firms disclose restatement in other SEC filing forms. I first separately test quantitative consideration variables and choose the most representative and optimal benchmark. To control for the decreasing relative frequency of 4.02-8K restatements, the decreasing trend of the frequency of overall restatements, and time-varying confounding effect such as changing accounting practices and interpretation about the Final rule, year dummy variables are included in all regressions. The simplified representation of model for my research question is as follows;

$$P(4.02\text{-}8K) = f\ (\beta_0 + \beta_1 QUANTITATIVE + \beta_2 QUALITATIVE1 + \beta_3 QUALITATIVE2 + \beta_4 CONTEXTUAL + \beta_5 OTHER\ CONTROL + Year\ Fixed\ Effects + \varepsilon) \tag{1}$$

3.5 Model Specification for Hypothesis

To test my hypothesis of whether 4.02-8K restatements increases the likelihood of future litigation risk, I adopt the Heckman two-stage selection model and control for the possibility that firms that are eager to lower future litigation risk might self-select less prominent disclosure venues.

The first stage involves estimating probability of choosing 4.02- 8K disclosure venue using the equation and variables I identified in previous section. Next, the Inverse Mills Ratio (INVERSEMILLS) is calculated based on the logit regression results. By

incorporating this ratio in the second stage equation, I can control for the possibility of firms choosing less prominent disclosure venue choice without regard to the non-reliance judgment to lower the litigation risk. If the coefficients of the Inverse Mills Ratio are significant in the second regression, it is likely there exits self-selection bias in the equation. I drop Qualitative1 consideration in equation (1) to abide by the Heckman exclusion condition that requires one or more variables in the first-stage regression should be excluded in the second-stage regression.

$$P(LITIGATION) = f\ (\beta_0 + \beta_1 4.02\text{-}8K + \beta_2 RS\_AMOUNT + \beta_3 Qualitative2 +$$
$$\beta_4 Contextual + \beta_5 Control\ variables + \beta_6 3DAY\_RETURN +$$
$$\beta_7 PRIOR\_RETURN + \beta_8 POST\_RETURN + \beta_9 SHARE\_TURN +$$
$$\beta_{10} FINANCIAL + \beta_{11} INVERSEMILLS + Year\ Fixed\ Effects + \varepsilon)\quad(2)$$

To test Myers et al. (2013)'s argument that different prominence of restatement disclosure induces differential economic consequences, I construct a new variable, PROMINENCE, which has value of 1 if restatement is disclosed in periodic SEC filings, 2 if disclosed in amended filings, and 3 if disclosed in 4.02-8K filings. In this test, the Heckman's first stage equation is based on the multinomial logit regression of PROMINENCE on quantitative, qualitative, and other variables I identified in the equation (1). In addition, the second stage equation is similar to equation (2) except for the fact that PROMINENCE replaces 4.02-8K. The simplified representation of first stage multinomial logit regression is as follows;

$$P(PROMINENCE) = f\ (\beta_0 + \beta_1 QUANTITATIVE + \beta_2 QUALITATIVE1 +$$
$$\beta_3 QUALITATIVE2 + \beta_4 CONTEXTUAL +$$
$$\beta_5 OTHERCONTROL + Year\ Fixed\ Effects + \varepsilon)\quad(3)$$

Chapter 4. RESULTS ANALYSIS

4.1 Descriptive Statistics and Univariate Analysis

Table 2 presents descriptive statistics about the regression variables after winsorizing all continuous dependent variables at the top and bottom 1% of their distributions. Panel B of Table 2 reports Pearson correlations. As expected, the correlation between the same consideration variables is significantly high, and 4.02-8K have a significant correlation with most variables in quantitative, qualitative, and contextual consideration.

TABLE 2
Descriptive Statistics

Panel A: Simple Statistics

Variable	N	Mean	STDDEV	Q1	Median	Q3
4.02-8K	3,431	0.53	0.50	0.00	1.00	1.00
|RS_ANI|	3,137	0.43	1.38	0.00	0.04	0.22
|RS_A3NI|	3,137	0.29	1.06	0.00	0.04	0.18
|RS_NQNI|	3,135	0.16	0.43	0.00	0.02	0.11
|RS_N3QNI|	3,137	0.27	1.00	0.00	0.04	0.19
|RS_ASALES|	3,072	0.12	0.64	0.00	0.00	0.02
|RS_EQUITY|	3,137	0.07	0.23	0.00	0.00	0.03
|RS_TA|	3,137	0.03	0.09	0.00	0.00	0.01
TREND_A	3,431	0.48	0.50	0.00	0.00	1.00
LOSS_A	3,431	0.42	0.49	0.00	0.00	1.00
TREND_Q	3,431	0.50	0.50	0.00	0.00	1.00
LOSS_Q	3,431	0.42	0.49	0.00	0.00	1.00
INCREASE	3,431	0.13	0.34	0.00	0.00	0.00
FRAUD	3,431	0.01	0.12	0.00	0.00	0.00
SEC	3,431	0.07	0.26	0.00	0.00	0.00
NUMBER	3,431	2.23	1.58	1.00	2.00	3.00
CORE	3,431	0.25	0.44	0.00	0.00	1.00
PERIOD	3,431	6.17	0.95	5.61	6.12	6.91
SEVERITY	3,431	0.79	0.89	0.00	1.00	1.00
AUDITOR	3,431	0.67	0.47	0.00	1.00	1.00
QUALITY	3,431	0.08	0.12	0.02	0.04	0.08
PRACTICES	3,429	0.48	0.07	0.43	0.48	0.52
AUDITOR_CHG	3,431	0.25	0.43	0.00	0.00	0.00
LITIGATION_RISK	3,431	0.28	0.45	0.00	0.00	1.00
DEBT_ISSUE	3,411	0.17	0.92	0.00	0.04	0.15
STOCK_ISSUE	3,411	0.10	0.83	0.00	0.01	0.04
DEBT_MONITER	3,431	0.26	0.44	0.00	0.00	1.00
STOCK_MONITER	3,431	0.75	0.44	0.00	1.00	1.00
INCENTIVE_RATIO	1,155	0.22	0.22	0.06	0.15	0.31
LOG_HOLDINGS	1,155	8.93	2.44	7.87	9.24	10.36
CEO_CHG	1,155	0.12	0.33	0.00	0.00	0.00
OVERCON_1	1,155	0.70	0.46	0.00	1.00	1.00
OVERCON_2	1,155	0.43	0.50	0.00	0.00	1.00
LOSS	3,431	0.59	0.49	0.00	1.00	1.00
GROWTH	3,431	2.16	2.79	1.04	1.36	2.11
SIZE	3,431	5.94	2.20	4.46	6.02	7.40
REPEAT	3,431	0.54	0.50	0.00	1.00	1.00
LITIGATION	3,413	0.16	0.36	0.00	0.00	0.00
PROMINENCE	3,431	2.19	0.91	1.00	3.00	3.00
3DAY_RETURN	3,047	-0.01	0.07	-0.04	0.00	0.02
PRIOR_RETURN	3,047	0.08	0.56	-0.25	0.03	0.32
POST_RETURN	3,047	0.00	0.13	-0.07	0.00	0.07
SHARE_TURN	3,047	0.69	0.27	0.50	0.77	0.93
FINANCIAL	3,431	0.17	0.38	0.00	0.00	0.00

TABLE 2 (continued)

Panel B: Correlations

Variable		1	2	3	4	5	6	7	8	9	10	11	12
4.02-8K	1	1.00											
|RS_ANI|	2	**0.17**	1.00										
|RS_A3NI|	3	**0.18**	**0.66**	1.00									
|RS_NQNI|	4	**0.21**	**0.57**	**0.65**	1.00								
|RS_N3QNI|	5	**0.18**	**0.56**	**0.84**	**0.68**	1.00							
|RS_ASALES|	6	**0.09**	**0.15**	**0.22**	**0.26**	**0.24**	1.00						
|RS_EQUITY|	7	**0.16**	**0.33**	**0.44**	**0.53**	**0.44**	**0.45**	1.00					
|RS_TA|	8	**0.14**	**0.38**	**0.50**	**0.60**	**0.50**	**0.63**	**0.79**	1.00				
TREND_A	9	0.02	**0.04**	**0.05**	**0.05**	**0.04**	**0.05**	0.00	**0.05**	1.00			
LOSS_A	10	**0.06**	**0.09**	**0.09**	**0.10**	**0.08**	**0.16**	**0.15**	**0.18**	**0.35**	1.00		
TREND_Q	11	**0.03**	**0.05**	**0.04**	**0.04**	**0.04**	0.03	0.02	**0.04**	**0.45**	**0.24**	1.00	
LOSS_Q	12	**0.04**	**0.07**	**0.08**	**0.10**	**0.08**	**0.16**	**0.15**	**0.16**	**0.26**	**0.65**	**0.35**	1.00
INCREASE	13	**0.07**	0.03	-0.00	0.02	-0.02	**0.06**	0.02	0.03	0.01	**0.04**	0.01	0.01
FRAUD	14	**0.10**	**0.04**	**0.04**	**0.07**	**0.04**	-0.01	**0.04**	0.03	0.02	0.01	0.02	0.01
SEC	15	**0.17**	**0.09**	**0.11**	**0.14**	**0.13**	**0.07**	**0.08**	**0.12**	0.02	**0.04**	-0.01	**0.03**
NUMBER	16	**0.19**	**0.05**	**0.07**	**0.06**	**0.07**	-0.04	0.03	0.00	0.00	-0.00	0.01	-0.02
CORE	17	**0.15**	0.03	0.01	**0.04**	0.02	-0.03	0.02	0.01	0.01	**0.04**	**0.04**	**0.06**
PERIOD	18	**0.18**	**0.14**	**0.16**	**0.20**	**0.16**	0.00	**0.08**	**0.06**	-0.02	**-0.11**	-0.02	**-0.09**
SEVERITY	19	**0.31**	**0.12**	**0.13**	**0.17**	**0.15**	-0.03	**0.06**	**0.05**	0.01	-0.02	0.01	-0.02
AUDITOR	20	-0.02	**-0.04**	**-0.07**	**-0.09**	**-0.05**	**-0.17**	**-0.17**	**-0.21**	**-0.05**	**-0.19**	-0.02	**-0.17**
QUALITY	21	-0.02	0.01	0.03	**0.08**	0.03	**0.23**	**0.24**	**0.33**	-0.01	**0.17**	0.00	**0.17**
PRACTICES	22	**0.15**	0.01	0.01	0.01	0.01	-0.03	0.01	-0.02	-0.03	**-0.06**	**-0.03**	**-0.08**
AUDITOR_CHG	23	**0.09**	**0.08**	**0.10**	**0.11**	**0.09**	**0.08**	**0.13**	**0.13**	-0.01	**0.07**	-0.02	**0.07**
LITIGATION_RISK	24	**0.09**	**0.06**	**0.09**	**0.14**	**0.08**	**0.05**	**0.04**	**0.09**	-0.02	**0.07**	0.02	**0.09**
DEBT_ISSUE	25	0.02	-0.01	-0.01	-0.02	-0.01	**0.13**	0.01	**0.12**	0.02	0.01	0.01	0.01
STOCK_ISSUE	26	0.00	0.00	0.01	0.02	0.01	**0.25**	**0.09**	**0.26**	0.02	**0.09**	0.03	**0.10**
DEBT_MONITER	27	**-0.08**	**-0.05**	**-0.08**	**-0.10**	**-0.07**	**-0.10**	**-0.10**	**-0.14**	-0.02	**-0.13**	-0.03	**-0.14**
STOCK_MONITER	28	0.00	**-0.04**	**-0.04**	**-0.06**	**-0.03**	**-0.14**	**-0.13**	**-0.15**	-0.03	**-0.16**	0.02	**-0.18**
INCENTIVE_RATIO	29	**-0.08**	-0.04	-0.00	-0.03	-0.01	-0.03	**-0.06**	-0.03	0.01	-0.01	-0.03	-0.06
LOG_HOLDINGS	30	-0.00	-0.05	-0.01	**-0.09**	-0.01	**-0.06**	**-0.11**	**-0.07**	-0.01	**-0.22**	-0.01	**-0.20**
CEO_CHG	31	-0.01	0.02	**0.06**	-0.01	0.04	0.02	0.03	0.03	-0.02	0.04	-0.03	0.00
OVERCON_1	32	0.05	0.00	0.01	-0.02	-0.00	-0.04	**-0.09**	-0.04	0.01	**-0.16**	-0.01	**-0.14**
OVERCON_2	33	0.01	**0.08**	-0.01	-0.04	-0.02	-0.03	-0.02	-0.05	**0.06**	**0.06**	0.01	0.02
LOSS	34	0.00	**0.11**	**0.09**	**0.11**	**0.06**	**0.13**	**0.18**	**0.16**	-0.06	**0.42**	-0.03	**0.39**
GROWTH	35	-0.02	0.02	**0.07**	**0.09**	**0.06**	**0.28**	**0.24**	**0.38**	0.02	**0.14**	0.03	**0.14**
SIZE	36	-0.03	**-0.07**	**-0.09**	**-0.16**	**-0.08**	**-0.24**	**-0.24**	**-0.31**	-0.04	**-0.29**	-0.02	**-0.28**
REPEAT	37	0.01	0.00	-0.00	0.01	-0.01	**0.04**	**0.04**	**0.04**	0.00	**0.04**	0.03	**0.05**
LITIGATION	38	**0.09**	**0.06**	**0.05**	**0.08**	**0.05**	0.02	0.03	**0.04**	0.03	-0.00	**0.03**	-0.02
PROMINENCE	39	**0.94**	**0.16**	**0.17**	**0.20**	**0.17**	**0.09**	**0.15**	**0.15**	0.02	**0.08**	0.03	**0.05**
3DAY_RETURN	40	**-0.07**	**-0.06**	**-0.03**	**-0.09**	**-0.05**	-0.01	**-0.04**	**-0.05**	**-0.09**	**-0.09**	**-0.09**	**-0.09**
PRIOR_RETURN	41	**-0.09**	0.00	0.00	-0.01	-0.01	**-0.05**	**-0.04**	**-0.05**	**-0.10**	**-0.11**	**-0.08**	**-0.08**
POST_RETURN	42	**-0.06**	0.01	-0.02	-0.02	-0.02	**-0.04**	-0.02	**-0.04**	**-0.05**	**-0.07**	**-0.06**	**-0.09**
SHARE_TURN	43	-0.00	-0.00	0.02	0.03	0.01	-0.03	0.00	0.01	**-0.04**	**-0.07**	-0.02	**-0.07**
FINANCIAL	44	0.01	**-0.04**	**-0.05**	**-0.10**	**-0.05**	**-0.04**	**-0.06**	**-0.09**	0.00	**-0.10**	-0.01	**-0.11**

		13	14	15	16	17	18	19	20	21	22	23	24
INCREASE	13	1.00											
FRAUD	14	**-0.05**	1.00										
SEC	15	-0.01	**0.08**	1.00									
NUMBER	16	-0.02	**0.14**	**0.04**	1.00								
CORE	17	0.01	**0.15**	0.02	**0.24**	1.00							
PERIOD	18	-0.03	**0.06**	**0.12**	**0.21**	0.01	1.00						
SEVERITY	19	-0.01	**0.30**	**0.37**	**0.59**	**0.59**	**0.49**	1.00					
AUDITOR	20	-0.01	0.00	**-0.08**	**0.11**	0.01	**0.18**	**0.11**	1.00				
QUALITY	21	0.01	-0.02	0.02	**-0.04**	**0.06**	**-0.07**	-0.03	**-0.24**	1.00			
PRACTICES	22	-0.03	-0.00	0.01	**0.04**	-0.02	**0.07**	**0.06**	0.01	**-0.12**	1.00		
AUDITOR_CHG	23	-0.02	0.01	**0.05**	**0.04**	0.01	**0.20**	**0.11**	**-0.30**	**0.14**	-0.00	1.00	
LITIGATION_RISK	24	-0.03	0.02	**0.03**	**0.06**	**0.07**	**0.12**	**0.13**	**0.04**	**0.28**	0.02		1.00
DEBT_ISSUE	25	-0.01	-0.01	**0.05**	0.02	-0.00	0.01	0.01	-0.02	**0.19**	-0.01	0.01	-0.01
STOCK_ISSUE	26	-0.00	-0.01	**0.06**	-0.02	-0.01	-0.02	-0.02	**-0.10**	**0.25**	-0.02	0.02	**0.06**
DEBT_MONITER	27	-0.01	0.00	-0.01	**0.11**	-0.02	**0.09**	**0.08**	**0.37**	**-0.15**	-0.05	**-0.15**	**-0.14**
STOCK_MONITER	28	0.02	0.03	-0.03	**0.05**	0.00	**0.13**	**0.09**	**0.44**	**-0.20**	**0.07**	**-0.16**	**0.07**
INCENTIVE_RATIO	29	-0.05	0.00	-0.01	-0.02	0.00	-0.01	-0.00	**-0.20**	**0.37**	**-0.35**	**0.06**	-0.01

LOG_HOLDINGS	30	-0.05	0.01	0.01	0.05	-0.07	**0.08**	0.01	**0.13**	**-0.12**	**0.16**	-0.05	0.05
CEO_CHG	31	0.02	0.04	0.02	**0.11**	0.03	-0.00	**0.07**	0.01	0.05	-0.02	0.03	0.04
OVERCON_1	32	-0.02	-0.01	0.05	**0.06**	0.01	**0.08**	**0.08**	**0.06**	-0.04	**0.08**	-0.03	**0.11**
OVERCON_2	33	-0.04	0.01	0.00	0.03	-0.02	-0.02	0.02	0.05	-0.07	0.01	**-0.08**	**-0.06**
LOSS	34	**0.05**	-0.03	-0.00	-0.03	**0.05**	**-0.10**	**-0.05**	**-0.16**	**0.17**	**-0.09**	**0.06**	**0.08**
GROWTH	35	-0.01	-0.02	**0.03**	-0.02	0.02	**-0.05**	-0.03	**-0.23**	**0.44**	**-0.08**	**0.09**	**0.10**
SIZE	36	-0.00	0.02	**-0.04**	**0.08**	**-0.08**	**0.15**	**0.07**	**0.57**	**-0.41**	**0.13**	**-0.25**	**-0.15**
REPEAT	37	**0.03**	-0.02	-0.02	0.02	**0.06**	0.01	0.01	-0.01	0.02	-0.00	0.02	0.00
LITIGATION	38	**-0.04**	0.04	0.02	**0.06**	**0.06**	**0.07**	**0.11**	**0.06**	-0.01	**0.04**	0.03	**0.07**
PROMINENCE	39	**0.06**	**0.09**	**0.18**	**0.18**	**0.13**	**0.13**	**0.28**	**-0.10**	0.01	**0.13**	**0.10**	**0.07**
3DAY_RETURN	40	0.01	**-0.07**	-0.02	-0.01	**-0.09**	0.02	**-0.05**	0.03	**-0.05**	-0.02	-0.03	
PRIOR_RETURN	41	**-0.04**	-0.02	-0.02	-0.02	-0.03	0.02	-0.01	**0.13**	-0.04	-0.02	-0.03	0.01
POST_RETURN	42	**-0.04**	-0.00	0.00	-0.02	-0.01	0.01	-0.00	**0.05**	0.03	**-0.06**	-0.03	0.00
SHARE_TURN	43	-0.02	0.01	-0.00	**0.08**	0.02	**0.10**	**0.09**	**0.31**	-0.01	-0.02	**-0.10**	**0.16**
FINANCIAL	44	-0.01	-0.03	-0.03	**-0.08**	**-0.11**	**-0.04**	**-0.12**	-0.03	**-0.11**	**0.18**	-0.04	**-0.28**

		25	26	27	28	29	30	31	32	33	34	35	36
DEBT_ISSUE	25	1.00											
STOCK_ISSUE	26	**0.75**	1.00										
DEBT_MONITER	27	-0.01	**-0.06**	1.00									
STOCK_MONITER	28	0.00	**-0.06**	**0.24**	1.00								
INCENTIVE_RATIO	29	-0.04	**0.45**	0.06	**-0.21**	1.00							
LOG_HOLDINGS	30	0.02	**-0.13**	**0.12**	**0.23**	0.05	1.00						
CEO_CHG	31	**0.07**	0.05	0.06	**-0.09**	**0.09**	**-0.11**	1.00					
OVERCON_1	32	-0.03	-0.01	0.04	**0.12**	0.04	**0.38**	-0.06	1.00				
OVERCON_2	33	**0.05**	0.04	**0.25**	-0.01	0.02	**0.08**	0.02	0.04	1.00			
LOSS	34	0.02	**0.08**	**-0.10**	**-0.20**	-0.04	**-0.31**	0.06	**-0.21**	0.01	1.00		
GROWTH	35	**0.12**	**0.31**	**-0.16**	**-0.19**	**0.37**	0.03	0.04	**0.11**	**-0.10**	**0.13**	1.00	
SIZE	36	-0.05	**-0.18**	**0.59**	**0.51**	**-0.17**	**0.31**	0.04	0.04	**0.25**	**-0.30**	**-0.43**	1.00
REPEAT	37	0.01	-0.02	0.01	0.00	**-0.08**	-0.02	-0.02	0.00	0.03	**0.10**	0.02	-0.01
LITIGATION	38	-0.01	-0.01	0.04	**0.12**	0.01	**0.11**	0.03	0.03	0.03	**-0.04**	0.03	**0.10**
PROMINENCE	39	0.03	0.01	**-0.11**	-0.06	**-0.08**	0.00	0.00	0.05	0.00	0.01	0.03	**-0.10**
3DAY_RETURN	40	-0.02	-0.01	0.04	0.00	**0.21**	0.02	0.03	0.02	0.04	-0.02	-0.01	**0.05**
PRIOR_RETURN	41	**0.05**	-0.03	**0.08**	0.01	-0.03	**-0.01**	0.02	-0.05	0.01	0.01	**-0.09**	**0.08**
POST_RETURN	42	**0.03**	0.02	**0.06**	0.01	**0.38**	**-0.12**	0.05	-0.02	0.02	0.00	**0.04**	0.02
SHARE_TURN	43	0.02	0.00	**0.24**	**0.42**	**-0.16**	**0.14**	-0.03	**0.10**	0.00	-0.02	**0.07**	**0.28**
FINANCIAL	44	0.02	**-0.04**	-0.01	-0.02	0.02	0.01	-0.04	**-0.13**	0.03	**-0.12**	**-0.14**	**0.27**

		37	38	39	40	41	42	43	44
REPEAT	37	1.00							
LITIGATION	38	**0.05**	1.00						
PROMINENCE	39	0.02	**0.10**	1.00					
3DAY_RETURN	40	-0.01	**-0.12**	**-0.08**	1.00				
PRIOR_RETURN	41	**-0.05**	-0.02	**-0.10**	0.01	1.00			
POST_RETURN	42	0.00	0.00	**-0.07**	0.05	**0.31**	1.00		
SHARE_TURN	43	**0.04**	**0.23**	0.00	0.01	**0.08**	0.05	1.00	
FINANCIAL	44	**-0.06**	-0.02	0.00	0.01	-0.02	0.01	**-0.21**	1.00

This table presents the Pearson correlation of the main variables. All continuous variables are winsorized at the 1% and 99% level. The values in bold are significantly different from zero at the 5% level.

Panel A of Table 3 presents the distribution of each restatement venue and the relative frequency of 4.02-8K restatements across different level of severity of restatements. As expected, the 4.02-8K restatement proportion is increasing as the restatement severity increases. Panel B and Panel C of Table 3 show that the proportion of 4.02-8K restatements is more widely spread when the misstated amount is zero or not available, which means that SEVERITY is functioning as a more critical non-reliance judgment criteria when quantitative information does not exist.

TABLE 3
Restatement Venue Frequency Analysis

Panel A: Full Sample

SEVERITY	Periodic	Amended	4.02-8K	Total	4.02-8K /Total
0	674	314	589	1,577	37%
1	378	101	709	1,188	60%
2	97	40	368	505	73%
3	11	4	120	135	89%
4	1	1	18	20	90%
5			6	6	100%
Total	1,161	460	1,810	3,431	53%

Panel B: Sample of |RS_ANI| > 0

SEVERITY	Periodic	Amended	4.02-8K	Total	4.02-8K /Total
0	181	62	375	618	61%
1	193	30	548	771	71%
2	60	13	308	381	81%
3	9	3	100	112	89%
4			15	15	100%
5			5	5	100%
Total	443	108	1,351	1,902	71%

Panel C: Sample of |RS_ANI| = 0 or NA

SEVERITY	Periodic	Amended	4.02-8K	Total	4.02-8K /Total
0	493	252	214	959	22%
1	185	71	161	417	39%
2	37	27	60	124	48%
3	2	1	20	23	87%
4	1	1	3	5	60%
5			1	1	100%
Total	718	352	459	1,529	30%

SEVERITY is an index variable that has value from 0 (least severe) to 5 (most severe). "Periodic" is the restatements disclosed in 10-K or 10-Q filings, "Amended" is disclosed in 10-K/A or 10-Q/A filings.

In Table 4, I present the frequency of securities class action lawsuits by the prominence of restatement disclosure (Panel A), by the severity of restatements (Panel B), and by prior litigation risk of the industry (Panel C). LIT/N column shows that the proportion of lawsuits-related restatements monotonically increases as the disclosure prominence, restatements severity, and industry litigation risk increases. This trend does not change when dismissed cases are excluded from the total litigation, as illustrated in ND/LIT column.

TABLE 4
Securities Class Action Lawsuits Frequency Analysis

Panel A: by PROMINENCE

PROMINENCE	N	LIT	DIS	LIT/N	ND/N
1	1,161	129	29	11.1%	8.6%
2	460	66	22	14.3%	9.6%
3	1,792	336	104	18.8%	12.9%
Total	3,413	531	155	15.6%	11.0%

Panel B: by SEVERITY

SEVERITY	N	LIT	DIS	LIT/N	ND/N
0	1,576	191	50	12.1%	8.9%
1	1,179	189	61	16.0%	10.9%
2	500	109	35	21.8%	14.8%
3	133	35	8	26.3%	20.3%
4	20	5	1	25.0%	20.0%
5	5	2	0	40.0%	40.0%
Total	3,413	531	155	15.6%	11.0%

Panel C: by Prior LITIGATION_RISK

LITIGATION RISK	N	LIT	DIS	LIT/N	ND/N
0	2,466	346	90	14.0%	10.4%
1	947	185	65	19.5%	12.7%
Total	3,413	531	155	15.6%	11.0%

N is the number of restatements related to securities class action lawsuits for each categories. LIT is the number of lawsuits-related restatements. DIS is the number of dismissed lawsuits. LIT/N is the proportion of lawsuits-related restatements. ND/N is the proportion of restatements related to Not-Dismissed lawsuits (ND = LIT-DIS). 19 restatements in the full sample are deleted because their litigation filing dates are earlier than 4.02 8-K restatement filing dates.

4.2 Test of Research Question

Table 5 reports the logistic regression results testing which variables are significantly associated with non-reliance judgments. Panel A includes only quantitative considerations; Panel B adds qualitative considerations, and Panel C combines the qualitative and quantitative considerations and additionally incorporates contextual and other control variables. Model specifications change according to the different independent variables adopted in each Model and Panel.

Panel A in Table 5 presents the effect of seven different quantitative benchmarks on non-reliance judgment. Individually, all seven coefficients on each variable are significantly positive as expected. Following Acito et al. (2015), I also calculate and compare AUC scores of each model to evaluate seven individual proxies for the optimal model selection.[20] AUC scores in Panel A range from 0.762 to 0.802 and |RS_N3QNI| scores the highest, consistent with AUC analysis result in Acito et al. (2015). Furthermore, when all variables are combined, the coefficients for annualized three-year quarterly net income is significantly positive and more sensitive compared to other benchmarks. Accordingly, I adopt |RS_N3QNI| for the single quantitative consideration measure.

---

[20] AUC stands for the area under the receiver operating characteristic (ROC) curve. Intuitively, ROC is a line that connects the true positive rate at the given false positive rate, and AUC measures the area under the ROC line. AUC score ranges from 0.5 for a perfect random model to 1 for a perfect model. Therefore, a comparison of AUC scores between different models enables the choice of more optimal model.

TABLE 5
Determinants of Non-reliance Judgment

Panel A: Quantitative Considerations

Dependent variable		4.02-8K							
Independent variable	Predicted sign	Model 1a		Model 2a		Model 3a		Model 4a	
		Coeff.	p	Coeff.	p	Coeff.	p	Coeff.	p
|RS_ANI|	+	0.412***	0.00						
|RS_A3NI|	+			1.987***	0.00				
|RS_NQNI|	+					1.809***	0.00		
|RS_N3QNI|	+							2.496***	0.00
|RS_ASALES|	+								
|RS_EQUITY|	+								
|RS_TA|	+								
REPEAT	?	0.013	0.88	0.015	0.86	0.008	0.92	0.024	0.77
Constant	-	-0.902***	0.00	1.007***	0.00	1.087***	0.00	0.964***	0.00
Year Fixed Effect		Included		Included		Included		Included	
Sample size		3,137		3,137		3,135		3,137	
Pseudo R2		0.145		0.179		0.157		0.188	
AUC		0.768		0.794		0.776		0.802	

Dependent variable		4.02-8K							
	Predicted sign	Model 5a		Model 6a		Model 7a		Model 8a	
		Coeff.	p	Coeff.	p	Coeff.	p	Coeff.	p
|RS_ANI|	+							-0.007	0.46
|RS_A3NI|	+							-0.080	0.45
|RS_NQNI|	+							-0.308	0.21
|RS_N3QNI|	+							2.855***	0.00
|RS_ASALES|	+	0.425***	0.00					0.330***	0.00
|RS_EQUITY|	+			2.329***	0.00			1.116**	0.02
|RS_TA|	+					4.819***	0.00	-4.575**	0.01
REPEAT	?	0.025	0.77	-0.010	0.90	-0.004	0.96	0.052	0.54
Constant	-	1.263***	0.00	1.193***	0.00	1.223***	0.00	0.946***	0.00
Year Fixed Effect		Included		Included		Included		Included	
Sample size		3,072		3,137		3,137		3,070	
Pseudo R2		0.135		0.145		0.139		0.196	
AUC		0.753		0.766		0.762		0.807	

TABLE 5 (continued)

Panel B: Qualitative Considerations with Quantitative Considerations

Dependent variable		4.02-8K					
	Predicted sign	Model 1b		Model 2b		Model 3b	
		Coeff.	p	Coeff.	p	Coeff.	p
|RS_N3QNI|	+	2.399***	0.00	2.177***	0.00	2.058***	0.00
TREND_A	?	-0.176*	0.07			-0.198**	0.05
LOSS_A	?	0.355***	0.00			0.408***	0.00
TREND_Q	?	0.115	0.23			0.124	0.21
LOSS_Q	?	-0.111	0.32			-0.124	0.29
INCREASE	?	0.336***	0.01			0.360***	0.00
FRAUD	+			1.222**	0.02	1.313**	0.02
SEC	+			0.951***	0.00	0.937***	0.00
NUMBER	+			-0.005	0.45	-0.003	0.94
CORE	+			0.197	0.08	0.201	0.16
PERIOD	+			0.068	0.12	0.092	0.12
SEVERITY	+			0.383***	0.00	0.376***	0.00
REPEAT	?	0.005	0.95	-0.004	0.96	-0.028	0.75
Constant	-	0.879***	0.00	0.141	0.74	-0.092	0.83
Year Fixed Effect		Included		Included		Included	
Sample size		3,137		3,137		3,137	
Pseudo R2		0.193		0.221		0.227	
AUC		0.802		0.815		0.817	

34

TABLE 5 (continued)

Panel C: Other Considerations and Full model

Dependent variable		4.02-8K					
	Predicted sign	Model 1c		Model 2c		Model 3c	
		Coeff.	p	Coeff.	p	Coeff.	p
|RS_N3QNI|	+			2.454 ***	0.00	2.041 ***	0.00
TREND_A	?					-0.186 *	0.05
LOSS_A	?					0.460 ***	0.00
INCREASE	?					0.417 ***	0.00
FRAUD	+					1.313 **	0.02
SEC	+					0.980 ***	0.00
NUMBER	+					0.012	0.39
CORE	+					0.258 **	0.04
PERIOD	+					0.087 *	0.08
SEVERITY	+					0.349 ***	0.00
AUDITOR	?	-0.012	0.91	-0.027	0.82	-0.040	0.76
QUALITY	?	-0.580	0.12	0.367	0.45	0.243	0.63
PRACTICES	?	3.663 ***	0.00	3.167 ***	0.00	3.526 ***	0.00
AUDOTOR_CHG	?	0.307 ***	0.00	0.191 *	0.08	0.071	0.54
LITIGATION_RISK	?	0.065	0.48	0.101	0.33	-0.016	0.88
DEBT_ISSUE	?	0.085	0.36	0.316 **	0.02	0.281 *	0.06
STOCK_ISSUE	?	-0.032	0.71	-0.137	0.35	-0.115	0.48
DEBT_MONITER	?	-0.318 ***	0.00	-0.364 ***	0.00	-0.442 ***	0.00
STOCK_MONITER	?	0.286 ***	0.01	0.100	0.41	0.049	0.70
LOSS	?			0.166 *	0.06	0.001	0.99
GROWTH	?			-0.037	0.10	-0.041 *	0.08
SIZE	?			0.072 **	0.03	0.076 **	0.03
REPEAT	?	0.063	0.41	0.020	0.82	-0.016	0.86
Constant	-	-0.954 ***	0.00	-1.074 ***	0.01	-2.082 ***	0.00
Year Fixed Effect		Included		Included		Included	
Sample size		3,389		3,096		3,096	
Pseudo R2		0.125		0.205		0.245	
AUC		0.732		0.807		0.826	

*, **, and *** indicate statistical significance for each regression coefficients at the 10 percent, 5 percent, and 1 percent levels, respectively, based on two-tailed (one-tailed) t-statistics without (with) a predicted sign. All significance levels are calculated based on robust standard errors corrected for firm-level clustering. AUC stands for the area under the ROC curve.

Table 5, Panel B documents that LOSS_A and INCREASE have positive effect on 8-K disclosure venue choice, and FRAUD, SEC and SEVERITY variables in the second part of qualitative considerations have positive, significant coefficient as predicted.

Panel C in Table 5 includes the contextual considerations that might have effect on firms' disclosure venue choice. In contrast to Acito et al. (2009), most quantitative and quantitative considerations remain significant even after controlling for the industry's accounting practices for 4.02-8K restatements disclosure choice (PRACTICES), indicating that firms apply their own criteria in addition to the general practices in the same industry. I also observe that firms place more weight on debt markets than equity market when it comes to making 4.02-8K disclosure choice.

4.3 Subsample Test: No Quantitative Information Subsample

Prior archival materiality literature removes observations if it could not evaluate the dollar amount of an error.[21] However, Panel C in Table 3 shows that a significant portion of restatements have zero effect on previous net income or have no information available about the quantitative effect.[22] Thus, I perform an additional test based on the subsample that has zero or NA value for the misstated amount (|RS_|)

The logit regression result for Model 1a in Table 6, Panel A corroborates the initial findings of Table 3 about the importance of the severity of restatements when no quantitative information is available. Specifically, Model 1a shows that SEVERITY is insignificant when the misstated amount is zero, but Model 2a in Table 6 reports significant

---

[21] Acito et al. (2009) drop firms "if the dollar amount of the error is indeterminate." Keune and Johnstone (2012) include only firms that disclose misstatement amounts in their SAB 108 disclosure.

[22] Specifically, 45% of all restatements (1,529 out of 3,431) sample have zero or NA value for their misstated amount; 1,235 restatements have zero effect, and 294 restatements have no information available.

positive coefficient of SEVERITY when the misstated amount is zero or not available. Model 2a also reports that SEC investigation (SEC), the misstated period (PERIOD), and industry accounting practices (PRACTICES) are positively associated with non-reliance judgment, but the prior industry litigation risk has negative effect on 4.02-8K disclosure venue choice.

TABLE 6
Subsample and Sensitivity Analyses

Panel A: Subsample analyses
Model 1a: sample with misstated amount = 0, Model 2a: sample with misstated amount = 0 or NA, Model 3a: restatements using periodic or amended disclosure venue

Dependent variable		4.02-8K				AMENDED	
	Predicted sign	Model 1a		Model 2a		Model 3a	
		Coeff.	p	Coeff.	p	Coeff.	p
|RS_N3QNI|	?					-0.474*	0.05
TREND_A	?	-0.108	0.52	-0.004	0.98	-0.131	0.44
LOSS_A	?	0.419**	0.04	0.357**	0.04	0.251	0.19
INCREASE	?					-0.802***	0.00
FRAUD	+						
SEC	+	1.125***	0.00	0.883***	0.00	0.826*	0.07
NUMBER	+	0.056	0.23	-0.036	0.29	-0.064	0.19
CORE	+	0.161	0.29	-0.147	0.27	-0.630***	0.02
PERIOD	+	0.341***	0.00	0.213**	0.01	-0.705***	0.00
SEVERITY	+	0.189	0.18	0.436***	0.01	0.103	0.32
AUDITOR	?	0.259	0.28	0.031	0.87	-1.186***	0.00
QUALITY	?	0.019	0.98	-0.344	0.59	-0.302	0.66
PRACTICES	?	3.620***	0.00	3.961***	0.00	-1.824	0.10
AUDOTOR_CHG	?	-0.019	0.93	0.064	0.70	0.032	0.88
LITIGATION_RISK	?	-0.372*	0.07	-0.408**	0.02	-0.187	0.36
DEBT_ISSUE	?	0.171	0.52	-0.047	0.59	0.045	0.89
STOCK_ISSUE	?	0.790	0.17	0.174	0.38	0.302	0.43
DEBT_MONITER	?	-0.376*	0.08	-0.350*	0.06	0.406*	0.07
STOCK_MONITER	?	-0.144	0.52	-0.058	0.74	-0.066	0.75
LOSS	?	-0.131	0.46	-0.162	0.30	-0.404**	0.03
GROWTH	?	-0.061	0.18	-0.036	0.23	0.023	0.56
SIZE	?	0.031	0.61	0.006	0.90	-0.028	0.66
REPEAT	?	-0.062	0.68	0.035	0.78	0.224	0.16
Constant	?	-3.447***	0.00	-2.999***	0.00	6.906***	0.00
Year Fixed Effect		Included		Included		Included	
Sample size		1,215		1,499		1,431	
Pseudo R2		0.170		0.153		0.309	

TABLE 6 (continued)

Panel B: Sensitivity analyses
Model 1b: restatements filed after 2007, Model 2b: restatements filed by unique firms,
Model 3b: Sample with restriction of Model 1 and Model 2

Dependent variable		4.02-8K					
	Predicted sign	Model 1b		Model 2b		Model 3b	
		Coeff.	p	Coeff.	p	Coeff.	p
|RS_N3QNI|	+	2.920***	0.00	2.020***	0.00	3.624***	0.00
TREND_A	?	-0.162	0.20	-0.110	0.36	-0.109	0.53
LOSS_A	?	0.693***	0.00	0.393***	0.01	0.715***	0.00
INCREASE	?	0.256	0.12	0.518***	0.00	0.206	0.34
FRAUD	+	1.717***	0.01	1.739**	0.04	2.443**	0.03
SEC	+	2.205***	0.00	0.764***	0.01	2.110***	0.00
NUMBER	+	-0.001	0.50	0.120**	0.01	0.096	0.12
CORE	+	0.375**	0.03	0.516***	0.00	0.781***	0.00
PERIOD	+	0.072	0.19	0.184***	0.01	0.226**	0.02
SEVERITY	+	0.140	0.19	0.226*	0.05	-0.154	0.24
AUDITOR	?	-0.167	0.29	0.044	0.77	-0.043	0.83
QUALITY	?	0.279	0.64	0.281	0.64	0.524	0.48
PRACTICES	?	2.817***	0.00	4.074***	0.00	3.781***	0.00
AUDOTOR_CHG	?	0.132	0.38	-0.041	0.77	0.021	0.92
LITIGATION_RISK	?	0.099	0.48	0.018	0.89	0.016	0.93
DEBT_ISSUE	?	0.366**	0.03	0.127	0.20	0.153	0.38
STOCK_ISSUE	?	-0.277	0.14	-0.029	0.79	-0.100	0.58
DEBT_MONITER	?	-0.354**	0.03	-0.449***	0.00	-0.266	0.22
STOCK_MONITER	?	-0.143	0.39	0.095	0.54	-0.157	0.49
LOSS	?	0.011	0.94	-0.030	0.81	-0.087	0.64
GROWTH	?	-0.058	0.13	-0.017	0.51	-0.028	0.48
SIZE	?	0.005	0.90	0.079	0.07	-0.050	0.41
REPEAT	?	0.051	0.66				
Constant	-	-1.943***	0.00	-3.317***	0.00	-3.236***	0.00
Year Fixed Effect		Included		Included		Included	
Sample size		1,932		2,093		1,127	
Pseudo R2		0.251		0.260		0.279	

*, **, and *** indicate statistical significance for each regression coefficients at the 10 percent, 5 percent, and 1 percent levels, respectively, based on two-tailed (one-tailed) t-statistics without (with) a predicted sign. All significance levels are calculated based on robust standard errors corrected for firm-level clustering. INCREASE and FRAUD are not included in Panel A because of the lack of observation. In Model 2 and Model 3 of Panel B, the second and subsequent restatements by the same firm are deleted so that a firm appear only once in sample.

4.4 Subsample Test: Amended versus Periodic Restatements

This paper does not focus on the different criteria for the restatements disclosure choice between the amended filings and the periodic filings, because this decision-making does not involve non-reliance judgments. However, Myers et al. (2013) argue that firms are hiding more severe restatements under periodic restatements, implying that there exists a systematic difference in decision-making process or contextual factors between periodic and amended restatements. Thus, I conduct additional logit regression using AMENDED variable as a dependent variable and the same control variables as in main analysis.

Model 3a in Table 6 reports some results consistent with Myers et al. (2013); Firms are more likely to report quantitatively larger errors, core accounting issues, and errors that have a longer misstated period in periodic filings instead of in amended filings. At the same time, I also find that the accounting errors related to SEC investigation (SEC) are still more likely to be disclosed in amended filings, all else being equal.

4.5 Sensitivity Test of Research Question

The Audit Analytics reports that the number of restatements disclosed by firms increased by 69% right after the enactment of the Final rule, and dropped by 31% two years later (Audit Analytics 2014). The number of restatements disclosures remains stable after that.[23] A sudden rise and fall of restatements can be attributed to several factors (Scholz 2014). First, the outbreak of specific accounting issues around that time forced many firms to increase restatement-related disclosure filings. For example, significant portion of disclosure are related to option backdating scandals (Bernile and Jarrell 2009) and lease

---

[23] The annual average restatements filings are 898 in last seven years and 843 in last three years. This trend is very similar to my sample frequency.

accounting issues (Acito et al. 2009) during that period. [24] Second, the SOX section 404 enactment in Nov. 2004 precipitates the discovery of firms' internal control weakness and its corrections through restatements. Third, a heightened regulatory environment after the Sarbanes-Oxley Act (2002) could induce firms' over-reaction to the new regulation.

Another issue for this type of an empirical study is that interpretation and accounting practices evolve over time after the adoption of new regulation. For example, the materiality judgment guideline undergoes major revision through SEC SAB 108 (Nov. 2006). SAB 108 clarifies that firms should consider the cumulative effect of errors for materiality judgment, although the individual errors recognized for each period might be immaterial (Keune and Johnstone 2012). Another case is related to the change and clarification of SEC interpretation about new Form 8-K filing requirement (EY 2009).[25]

Thus, one possible concerns about my research design is that transitional events might drive my findings. To mitigate this concern, I remove the restatements data disclosed between Aug. 2004 and Dec. 2006, and run the regression as a sensitivity test.

Model 1b in Table 6 includes observations ranging from 2007 to 2013, and shows the similar results to that of the full sample, implying that the temporary surge of restatements right after the new regulation does not drive the main findings.

Another sensitivity test is conducted to mitigate the concern that significant portion of restatements are repeatedly disclosed by the same firm, and these firms' specific characteristics might drive the main findings of this paper. In fact, 56% of restatements are

---

[24] "As of December 2006, at least 140 companies were under public scrutiny due to allegations that they engaged in illegal backdating of option grants" (Bernile and Jarrell 2009). And "Beginning in late 2004 through mid-2006, more than 250 U.S. firms disclosed that the operating lease accounting methods they had been using violated generally accepted accounting principles (GAAP)" (Acito et al. 2009)

[25] "The SEC staff has reiterated its preference, consistent with Question 1 of its November 2004 Form 8-K FAQs, that Item 4.02 events should be reported using Form 8-K, irrespective of whether the required information has been disclosed in a periodic report or elsewhere" (EY 2009).

filed by firms that restate their past financial statements more than once, and untabulated results shows that 247 firms restate their financial statements more than three times during the sample period.

Model 2b of Panel B in Table 6 contains the first restatements filed by a firm and deletes its subsequent restatements, if any. The results are similar to the main findings and insensitive to the sample restriction to the unique firms. The last sensitivity test applies previous two restrictions at the same time, and the results reported in Model 3b are qualitatively similar to the previous sensitivity tests and the main findings, with the exception that all contextual and control variable except for PRACTICE become insignificant.

4.6 Additional Test: Auditor Fixed Effect

Acito et al. (2009) provide evidence that Big4 auditing firms are more likely to use out-of-period adjustments over formal restatements than non-Big4 auditing firms do, and each auditing firms have their own materiality thresholds. Adopting their research design, I investigate whether there exists difference between Big4 and non-Big4 auditing firms when it comes to making non-reliance judgments.

Simple statistics about the frequency of 4.02-8K restatements show that Big4 auditing firms use 4.02-8K restatements less frequently than non-Big4 firms.[26] To examine further, I first run the logit analysis using four indicator variables for each Big4 auditing firm. Model 1a in Panel A of Table 7 reports that three (one) of the Big4 auditing firms are

---

[26] 51.8% (1,194 out of 2,306) of restatements are filed through 4.02-8K by firms having Big4 auditing firms, and 54.8% (616 out of 1,125) of restatements are filed by firms having non-Big4 auditing firms.

insignificantly (significantly) different from non-Big4 firms. [27] Additional Wald Chi-square test to examine whether there exists a non-reliance judgment threshold difference between Big4 firms shows that the null hypothesis that all auditing firms use the same thresholds is rejected at 10% significance level. Model 1b uses only Big4 auditing firms and confirms the previous result that one of Big4 auditing firm is significantly less like to execute 4.02-8K filing compared to other three Big4 firms.

---

[27] The auditing firm numbers are randomly assigned.

TABLE 7
Additional Analyses

Panel A: Auditor difference
Model 1: full sample with big4 indicator variables, Model 2: big4 auditing firm only sample

Dependent variable		4.02-8K			
	Predicted sign	Model 1a		Model 2a	
		Coeff.	p	Coeff.	p
AUDITOR1	?	0.000	1.00	0.357[**]	0.03
AUDITOR2	?	-0.288[*]	0.06		
AUDITOR3	?	0.044	0.78	0.340[**]	0.03
AUDITOR4	?	0.074	0.65	0.415[**]	0.02
Control variables		Included		Included	
Year Fixed Effect		Included		Included	
Sample size		3,096		2,174	
Pseudo R2		0.247		0.351	

Wald Chi-square test:
H_0: AUDITOR1=AUDITOR2=AUDITOR3=AUDITOR4=0, Chi2 (4)=7.78[*] (p=0.10)

Panel B: CEO influence
Model 1: OVERCON_1 for CEO overconfidence proxy, Model 2: OVERCON_2 for CEO overconfidence proxy

Dependent variable		4.02-8K			
	Predicted sign	Model 1b		Model 2b	
		Coeff.	p	Coeff.	p
INCENTIVE_RATIO	?	-0.619	0.26	-0.492	0.37
LOG_HOLDINGS	?	0.019	0.71	-0.009	0.85
CEO_CHG	?	-0.493[**]	0.05	-0.474[*]	0.06
OVERCON_1	?	-0.303	0.15		
OVERCON_2	?			0.258	0.16
Control variables		Included		Included	
Year Fixed Effect		Included		Included	
Sample size		1,124		1,124	
Pseudo R2		0.406		0.406	

TABLE 7 (continued)

Panel C: Before and After Analysis
BEFORE: Jan. 2000 ~ Aug. 2004, AFTER_2004: Aug. 2004 ~ Dec. 2013, AFTER_2007: Jan. 2007 ~ Dec. 2013

Dependent variable		8-K		4.02-8K			
	Predicted sign	Before		After_2004		After_2007	
		Coeff.	p	Coeff.	p	Coeff.	p
RS_N3QNI	+	0.744***	0.00	1.295***	0.01	2.173***	0.00
TREND_A	?	-0.138	0.46	-0.048	0.82	-0.019	0.93
LOSS_A	?	-0.005	0.98	0.466*	0.06	0.701***	0.01
INCREASE	?	0.045	0.86	0.375	0.18	0.214	0.47
FRAUD	+	-0.066	0.45	1.378**	0.05	1.782**	0.02
SEC	+	0.002	0.50	0.982**	0.01	2.207***	0.00
NUMBER	+	-0.019	0.39	0.031	0.34	0.020	0.41
CORE	+	0.484**	0.04	-0.219	0.24	-0.096	0.39
PERIOD	+	0.191*	0.05	-0.103	0.22	-0.117	0.21
SEVERITY	+	0.410**	0.03	-0.064	0.40	-0.275	0.16
AUDITOR	?	0.398	0.16	-0.439	0.17	-0.570*	0.09
QUALITY	?	-0.424	0.62	0.678	0.50	0.733	0.48
PRACTICES	?	1.964	0.21	1.550	0.36	0.815	0.65
AUDOTOR_CHG	?	-0.051	0.78	0.123	0.58	0.187	0.44
LITIGATION_RISK	?	0.023	0.91	-0.040	0.87	0.075	0.77
DEBT_ISSUE	?	-0.107	0.69	0.388	0.21	0.475	0.14
STOCK_ISSUE	?	0.034	0.95	-0.150	0.80	-0.311	0.61
DEBT_MONITER	?	-0.363	0.14	-0.077	0.78	0.014	0.96
STOCK_MONITER	?	0.614***	0.01	-0.563**	0.03	-0.758***	0.01
LOSS	?	0.227	0.30	-0.219	0.36	-0.207	0.42
GROWTH	?	-0.019	0.68	-0.021	0.69	-0.039	0.51
SIZE	?	0.187***	0.01	-0.111	0.16	-0.180**	0.03
REPEAT	?	-0.075	0.35				
AFTER	+	2.559**	0.03				
Constant	-	-5.570***	0.00				
Year Fixed Effect		Included				Included	
Sample size		3816				2652	
Pseudo R2		0.236				0.231	

*, **, and *** indicate statistical significance for each regression coefficients at the 10 percent, 5 percent, and 1 percent levels, respectively, based on two-tailed (one-tailed) t-statistics without (with) a predicted sign. All significance levels are calculated based on robust standard errors corrected for firm-level clustering. AFTER_2004 (AFTER_2007) column measures the incremental effect of an independent variable after the SEC Final rule (after year 2007) compared to before the SEC Final rule.

4.7 Additional Test: CEO influence

The CEO is one of the key decision makers in an important accounting issue such as a restatement.[28] However, whether and under what condition CEO exercises influence over restatements decision making remain unanswered. Therefore, I include three variables widely adopted in accounting literature to account for the effect of CEO on a firm's accounting choices: CEO incentives, CEO turnover, and CEO overconfidence.

First, the CEO incentive structure tied to the stock performance might be associated with disclosure venue choice of firm. Following Bergstresser and Philippon (2006), I include CEO_INCENTIVES, the incentive ratio that captures a CEO's normalized compensation increases in response to 1% point increase in the firms' share price. At the same time, to adjust for differential size effect of equity-based compensation, I include the natural log of the sum of in-the-money option value and share compensation (CEO_LOGHOLDINGS).[29]

Second, CEO turnover might increase the probability of reviewing prior accounting practices and disclosing them in timely and prominent way to attribute the prior errors to former CEO. In contrast, as Plumlee and Yohn (2014) predict and find, the restatements after CEO turnover might be less likely to be associated with transparent disclosure because the errors in prior CEO tenure are no longer relevant to financial statements users. To

---

[28] Keune and Johnstone (2012) analyze the interaction of managers, auditors, and audit committees in association with materiality judgments and the resolution of detected errors. Although the interaction between manager and auditor is not a primary research focus, I include an indicator variable for clients of Big4 auditors and capital market monitoring variables to control for the different incentives of auditors and managers.

[29] This variable also controls for the effect of compensation incentives on the overconfidence because the option exercise delay may be "mechanically related to the CEO's total holdings in the firm" (Schrand and Zechman 2012).

resolve these conflicting predictions, I include CEO turnover indicator variable (CEO_CHG) for this additional test.

Third, the specific characteristics of the CEO might have systematic effect on disclosure venue choice. Accounting and behavioral finance literature documents the effect of individual psychology on various corporate decisions such as investment, managerial forecast, and financial reporting (Hribar and Yang 2014). For instance, Schrand and Zechman (2012) evidence that overconfident executives are more likely to be involved with intentional restatement due to their optimistic bias about firms' future performance. However, whether the overconfidence trait might affect materiality and non-reliance judgment is open questions.

Following Schrand and Zechman (2012), I construct two proxies to measure the overconfidence of the CEO. The first proxy, CEO_OVER1, is an indicator variable that equals 1 if CEO's unexercised option is greater than the same industry median, and 0 otherwise. The second proxy, CEO_OVER2, is also indicator variable having value of 1 if at least three of five criteria are satisfied.[30]

Panel B in Table 7 summarizes the effect of three CEO related variables on non-reliance judgment. All sample statistics reported in Table 2 are similar to Bergstresser and Philippon (2006) and Schrand and Zechman (2012). Model 1b and Model 2b are different in that each model uses different CEO overconfidence measures. All control variables including quantitative consideration are included but not reported separately. The results indicate that CEO incentives and overconfidence seem to have no effect on firms' non-

---

[30] 1. Industry-adjusted excess investment is above the median, 2. Industry-adjusted net acquisitions is above the median, 3. Industry-adjusted debt to equity ratio is above the median, 4. Either convertible debt or preferred stock is used, and 5. Dividend payout ratio is positive.

reliance judgment about prior errors. However, consistent with Plumlee and Yohn (2014), I find that non-reliance judgment is less likely to occur when CEO of misstated period departures the company, implying that CEO turnover contributes to gaining the investors' reliance on financial statements at least from firms' perspective.

4.8 Additional Test: Before and After Analysis

The nature of Form 8-K disclosure changes from the voluntary to mandatory disclosure venue through which a firm reveals its initial discovery of an error and plausible future restatement. To find empirical evidence to support this argument, I expand my data period to the Jan. 2000 and compare the determinants that drive 8-K disclosure before the Final rule and 4.02-8K disclosure after the Final rule. 8-K is an indicator variable that equals 1 if a firm use Form 8-K to disclosure restatement, and 0 otherwise. The coefficient β (α) measure the effect (the differential effect) of each individual variables on the likelihood of 8-K (4.02 8-K) disclosure venue choice before the Final rule (after the Final rule).

$$P(8\text{-}K) = f(\beta_0 + \beta_1 QUANTITATIVE + \beta_2 QUALITATIVE1 + \beta_3 QUALITATIVE2 +$$
$$\beta_4 CONTEXTUAL + \beta_5 OTHER \quad CONTROL + \alpha_0 +$$
$$\alpha_1 QUANTITATIVE + \alpha_2 QUALITATIVE1 + \alpha_3 QUALITATIVE2 +$$
$$\alpha_4 CONTEXTUAL + \alpha_5 OTHER \, CONTROL + Year \, Fixed \, Effects + \varepsilon) \qquad (4)$$

Panel C in Table 7 presents the before and after analysis results. Several results indicate the disclosure regime changes from discretion to requirement. First, the quantitative criteria have significantly positive effect even before the Final rule, as expected. However, the size of the coefficient significantly increases after the Final rule, meaning that firms place more weight on the quantitative consideration threshold because

the quantitative benchmark is the first and foremost criteria to meet under the mandatory regime. Second, restatements related to the fraud and SEC investigation are more likely to be disclosed on Form 8-K after the Final rule, implying that firms become more sensitive to issues related to the regulatory body. In contrast, qualitative considerations related to accounting errors such as CORE, PERIOD, and SEVERITY become less significant after the Final rule. Third, stock market monitoring effect works the other way after the Final rule, showing that firms' voluntary incentive to provide information to stock market significantly decreases under mandatory disclosure regime.

To mitigate the concern of the transitional period, I report the sensitivity test results in the third column (After_2007). The results are similar to main analysis results in second column.[31]

4.9 Test of Hypothesis

Table 8 reports the effect of 4.02-8K disclosure on the future securities class action lawsuits after controlling for the restatements characteristics, contextual and other control variables related to the restatements, and stock market response control variables as well as endogeneity issue of firms' opportunistic disclosure choice by adopting Heckman's two stage model.

As the litigation stage unfolds, some lawsuits are terminated at the request of plaintiffs or by the determination of a judge prior to the trial process because the litigation becomes less likely to win after the discovery of new evidence or because of negligible legal merit to continue the case. Previous literature about the association between

---

[31] For simplicity, the before analysis result of After_2007 is not reported, but the results is almost identical to the first column.

accounting events and litigation risk usually performs robustness tests after deleting dismissed cases (e.g., Files et al. 2009). Following this research design, I search the dismissed cases from the Securities Class Action Clearinghouse (http://securities.stanford.edu) and report the results in the separate column (ND_CASES) after deleting dismissed cases.

The first stage regression results are exactly same as Model 3c in Table 5. The Inverse Mills Ratio is calculated based on this first stage regression prediction and added to the second stage regression as one of control variables. Table 8 presents the second stage regression. The current stock market response (3DAY_RETURN) and stock turnover (SHARE_TURN) have significant effect on future litigation risk in predicted direction.[32]

---

[32] In an untabulated sensitivity test, I use litigations filed within one year after the restatements announcement, and find qualitatively similar results.

TABLE 8
4.02-8K Restatements and Litigation Risk

Panel A: Main analysis

Dependent variable		LITIGATION			
	Predicted sign	ALL_CASES		ND_CASES	
		Coeff.	p	Coeff.	p
4.02-8K	+	0.213*	0.07	0.099	0.27
|RS_N3QNI|	+	0.007	0.44	0.040	0.20
FRAUD	+	-0.204	0.31	0.024	0.48
SEC	?	-0.221	0.40	-0.543*	0.09
NUMBER	+	-0.003	0.48	-0.008	0.45
CORE	+	0.010	0.48	0.031	0.44
PERIOD	+	-0.014	0.44	-0.054	0.29
SEVERITY	+	0.136	0.17	0.151	0.17
AUDITOR	?	-0.210	0.28	-0.263	0.24
QUALITY	?	0.876	0.15	1.195*	0.07
PRACTICES	?	-0.850	0.47	-0.204	0.88
AUDOTOR_CHG	?	0.213	0.21	0.249	0.16
LITIGATION_RISK	?	0.285*	0.06	0.024	0.91
DEBT_ISSUE	?	-0.094	0.36	-0.434	0.12
STOCK_ISSUE	?	0.069	0.84	0.066	0.86
DEBT_MONITER	?	-0.265	0.18	-0.269	0.25
STOCK_MONITER	?	0.241	0.35	0.256	0.40
LOSS	?	-0.192	0.14	-0.279*	0.07
GROWTH	?	0.075*	0.06	0.075	0.10
SIZE	?	0.179***	0.00	0.155**	0.03
REPEAT	?	0.289**	0.03	0.453***	0.00
3DAY_RETURN	-	-4.778***	0.00	-4.898***	0.00
PRIOR_RETURN	-	-0.116	0.17	-0.124	0.20
POST_RETURN	-	-0.134	0.38	-0.512	0.14
SHARE_TURN	+	2.910***	0.00	2.955***	0.00
FINANCIAL	?	0.259	0.26	0.380	0.14
INVERSEMILLS	?	-1.828	0.12	-2.607**	0.05
Constant	-	-3.990***	0.00	-3.700***	0.01
Year Fixed Effect		Included		Included	
Sample size		2,866		2,728	
Pseudo R2		0.133		0.130	

TABLE 8 (continued)

Panel B: Sensitivity analysis

Subsamples		AFTER_2007				UNIQUE_FIRMS				BOTH_REST			
Dependent variable		LITIGATION											
	Predicted sign	ALL_CASES		ND_CASES		ALL_CASES		ND_CASES		ALL_CASES		ND_CASES	
		Coeff.	p	Coeff.	p	Coeff.	p	Coeff.	p	Coeff.	p	Coeff.	p
4.02-8K	+	0.265*	0.07	0.152	0.23	0.383**	0.01	0.358**	0.04	0.482**	0.02	0.539**	0.03
|RS_N3QNI|	+	-0.066	0.20	-0.024	0.38	0.034	0.25	0.075**	0.05	-0.104	0.15	-0.071	0.27
SEVERITY	+	0.300*	0.06	0.263*	0.10	0.220*	0.09	0.276*	0.08	0.611**	0.01	0.658**	0.02
SIZE	?	0.110	0.16	0.108	0.24	0.233***	0.00	0.215***	0.00	0.144	0.11	0.143	0.15
REPEAT	?	0.142	0.42	0.377*	0.07								
3DAY_RETURN	-	-4.103***	0.00	-3.949***	0.00	-5.595***	0.00	-5.848***	0.00	-4.614***	0.00	-4.257***	0.00
SHARE_TURN	+	3.567***	0.00	3.537***	0.00	2.679***	0.00	2.654***	0.00	3.283***	0.00	3.211***	0.00
INVERSEMILLS	?	-2.301**	0.05	-3.353***	0.01	-0.847	0.51	-1.145	0.43	-1.670	0.20	-2.768*	0.07
Constant	-	-3.071**	0.02	-2.751*	0.06	-4.963***	0.00	-4.927***	0.00	-2.620*	0.06	-1.488	0.23
Control variables		Included		Included		Included		Included		Included		Included	
Year Fixed Effect		Included		Included		Included		Included		Included		Included	
Sample size		1,810		1,737		1,925		1,820		1,052		1,002	
Pseudo R2		0.150		0.142		0.139		0.133		0.165		0.150	

*, **, and *** indicate statistical significance for each regression coefficients at the 10 percent, 5 percent, and 1 percent levels, respectively, based on two-tailed (one-tailed) t-statistics without (with) a predicted sign. All significance levels are calculated based on robust standard errors corrected for firm-level clustering. ALL_CASES (ND_CASES) includes (excludes) dismissed cases. AFTER_2007 includes restatements filed after 2007. UNIQUE_FIRMS includes the first restatement filed by a firm and delete the second and subsequent restatements, if any. BOTH_REST applies both restrictions at the same time.

Consistent with limited attention theory and the findings of File et al (2009), I find a positive association between 4.02-8K restatements disclosure venue and future class action litigation risk. This finding implies that 4.02-8K disclosure venue choice instead of 10-K (Q) or 10-K/A (Q/A) venue is associated with about 24% *(=exp(0.213)-1)* increase in the odds of a future class action lawsuit, holding all other variables constant. Meanwhile, the analysis of not-dismissed litigations sample in the next column indicates that 4.02-8K restatements have no effect on the likelihood of future lawsuits, meaning that 4.02-8K venue choice only increases the possibility of frivolous litigation without generating serious legal consequences. However, contrary to the prior section results (e.g., Table 5), REPEAT variable have significant effect in both regression, implying that unobservable characteristics of firms that repeat restatements might drive this insignificant results. Thus, whether specific firms' characteristics are omitted but correlated with litigation risk is an empirical question.

To answer this question and perform a sensitivity test, I use three subsamples as in my research question section. Specifically, I first delete restatements observations between Aug. 2004 and Dec. 2006, and report the results in AFTER_2007 column in Panel B of Table 8. All independent variables in Panel A regression are included, but not reported for simplicity. The results is similar to main results in Panel A in that REPEAT is significant while 4.02-8K is not significant for ND_CASES, implying that the specific time period has no explanatory power.

UNIQUE_FIRMS column in Table 8 presents the two-stage logit regression analysis using the unique firm sample after deleting the second and subsequent restatements filed by the same firm. Further, the sample selected by prior two restrictions

at the same time is analyzed and presented in BOTH_REST column. The coefficients of 4.02-8K are all significantly positive, even in the cases excluding dismissed litigation, confirming that the disclosure venue choice has significant effect on future litigation risk even in the restricted sample, and restatement-repeating firms are accountable for the dismissed cases.

The effect of 4.02-8K disclosure on the increasing likelihood of future litigation seemingly speaks to the possibility that firms may choose to shun the requirement of the Final rule to lower the litigation cost, consistent with frequency analysis in Panel C of Table 1. Alternatively, firms' potential opportunistic disclosure choice behavior might also come from the safer harbor clause in the Final rule.[33] According to this clause, firms shall not be deemed to violate the Rule 10B-5 (e.g., fraud or deceit) under the Securities Exchange Act for the failure to report Item 4.02 event on Form 8-K.[34] Although this is the case, my main finding about 4.02-8K disclosure effect on litigation risk is not be affected. However, further research is warranted to understand the role of safe harbor on firms' disclosure decision making.

4.10 Additional Test: Prominence of Disclosure Venue

The effect of different prominence of restatements disclosure on litigation risk is reported in Table 9. Using multinomial logit regression, I first estimate two first-stage regressions using periodic restatements as base outcome. In untabulated results, the first

---

[33] A safer harbor is adopted under Regulation FD to protect managers from potential legal liabilities arising from the forward looking statements. The SEC recognizes the similarity between Regulation FD and new Form 8-K requirement in that "the new Form 8-K disclosure items may require management to quickly assess the materiality of an event or to determine whether a disclosure obligation has been triggered (SEC 2004a)," and decides to endow the similar legal protection for several items on Form 8-K including item 4.02.

[34] "The safe harbor only applies to a failure to file a report on Form 8-K. Thus, material misstatements or omissions in a Form 8-K will continue to be subject to Section 10(b) and Rule 10b-5 liability" (SEC 2004a).

(second) logit regression estimates the effect of one unit increase of independent variable for amended (4.02-8K) restatements relative to periodic restatements while all other things being held constant.[35] I predict the probability of each disclosure venue choice, and construct two Inverse Mills Ratios and include them in the second stage logit regression to control for the endogeneity problem of firms' disclosure choice.

The results are qualitatively similar to that of main regression. The positive and significant coefficient of PROMINENCE in ALL_CASES in Panel A indicates that more prominent disclosure venue would increase the odds of future litigation risk by 16.3% *(=exp(0.151)-1)*. As in Panel A of Table 8, ND_CASES is insignificant due to the effect of restatements repeating firms. However, the effect of prominent disclosure on litigation risk becomes significant after eliminating repetitive firm observations.

These findings are robust to the exclusion of the first two-year observations and the elimination of the second and subsequent restatements by the same firm. The detailed regression results are provided in Panel B of Table 9. The incremental litigation risk for the prominent disclosure ranges from 15% to 30% depending on different sample specification.

---

[35] The first (second) logit regression is qualitatively similar to the Model 3a in Table 6 (Model 3c in Table 5).

TABLE 9
Disclosure Prominence and Litigation Risk

Panel A: Main analysis

Dependent variable		LITIGATION			
	Predicted sign	ALL_CASES		ND_CASES	
		Coeff.	p	Coeff.	p
PROMINENCE	+	0.151**	0.03	0.076	0.21
|RS_N3QNI|	+	0.602*	0.09	0.532	0.15
FRAUD	+	7.305***	0.01	8.286***	0.01
SEC	?	-0.500	0.28	-1.013*	0.08
NUMBER	+	0.027	0.30	0.009	0.44
CORE	+	0.444**	0.03	0.639**	0.02
PERIOD	+	0.320**	0.02	0.369**	0.03
SEVERITY	+	0.233*	0.07	0.238*	0.09
AUDITOR	?	0.378	0.29	0.510	0.26
QUALITY	?	1.172**	0.05	1.555**	0.02
PRACTICES	?	0.943	0.44	1.973	0.18
AUDOTOR_CHG	?	0.296**	0.05	0.228	0.18
LITIGATION_RISK	?	0.286*	0.10	0.099	0.64
DEBT_ISSUE	?	-0.067	0.60	-0.440	0.12
STOCK_ISSUE	?	0.051	0.88	0.080	0.83
DEBT_MONITER	?	-0.596***	0.01	-0.598**	0.02
STOCK_MONITER	?	0.339	0.20	0.418	0.18
LOSS	?	0.037	0.80	-0.049	0.77
GROWTH	?	0.050	0.22	0.043	0.35
SIZE	?	0.238***	0.00	0.209***	0.01
REPEAT	?	0.189	0.18	0.334**	0.04
3DAY_RETURN	-	-4.652***	0.00	-4.716***	0.00
PRIOR_RETURN	-	-0.141	0.12	-0.131	0.18
POST_RETURN	-	-0.117	0.39	-0.493	0.15
SHARE_TURN	+	2.858***	0.00	2.877***	0.00
FINANCIAL	?	0.250	0.28	0.379	0.14
INVERSEMILLS1	?	-0.126	0.34	-0.233	0.15
INVERSEMILLS2	?	0.272**	0.01	0.314**	0.02
Constant	-	-8.228***	0.00	-9.387***	0.00
Year Fixed Effect		Included		Included	
Sample size		2,860		2,720	
Pseudo R2		0.136		0.132	

TABLE 9 (continued)

Panel B: Sensitivity analysis

Subsamples		AFTER_2007				UNIQUE_FIRMS				BOTH_REST			
Dependent variable		LITIGATION											
	Predicted sign	ALL_CASES		ND_CASES		ALL_CASES		ND_CASES		ALL_CASES		ND_CASES	
		Coeff.	p	Coeff.	p	Coeff.	p	Coeff.	p	Coeff.	p	Coeff.	p
PROMINENCE	+	0.143*	0.07	0.094	0.21	0.209**	0.02	0.195*	0.06	0.197*	0.06	0.263**	0.05
|RS_N3QNI|	+	1.772***	0.01	1.633**	0.02	0.173	0.38	-0.242	0.36	2.454***	0.01	2.002**	0.05
SEVERITY	+	0.284*	0.08	0.255	0.11	0.362**	0.02	0.409**	0.03	0.854***	0.00	0.886***	0.01
SIZE	?	0.178**	0.04	0.168*	0.09	0.245***	0.00	0.190***	0.01	0.139	0.12	0.113	0.27
REPEAT	?	0.184	0.30	0.417**	0.04								
3DAY_RETURN	-	-3.972***	0.00	-3.742***	0.00	-5.423***	0.00	-5.579***	0.00	-4.236***	0.00	-3.536**	0.01
SHARE_TURN	+	3.501***	0.00	3.443***	0.00	2.635***	0.00	2.586***	0.00	3.190***	0.00	3.123***	0.00
INVERSEMILLS1	?	-0.015	0.91	-0.057	0.70	-0.214	0.18	-0.448**	0.03	-0.067	0.68	-0.173	0.36
INVERSEMILLS2	?	0.297**	0.02	0.943**	0.04	0.277**	0.02	0.373**	0.01	0.383**	0.02	0.407**	0.03
Constant	-	-6.666***	0.00	-7.099***	0.00	-9.078***	0.00	-11.22***	0.00	-5.920***	0.00	-6.113***	0.00
Control variables		Included		Included		Included		Included		Included		Included	
Year Fixed Effect		Included		Included		Included		Included		Included		Included	
Sample size		1,807		1,734		1,922		1,817		1,048		998	
Pseudo R2		0.154		0.144		0.142		0.139		0.175		0.160	

*, **, and *** indicate statistical significance for each regression coefficients at the 10 percent, 5 percent, and 1 percent levels, respectively, based on two-tailed (one-tailed) t-statistics without (with) a predicted sign. All significance levels are calculated based on robust standard errors corrected for firm-level clustering. ALL_CASES (ND_CASES) includes (excludes) dismissed cases. AFTER_2007 includes restatements filed after 2007. UNIQUE_FIRMS includes the first restatement filed by a firm and delete the second and subsequent restatements, if any. BOTH_REST applies both restrictions at the same time.

Chapter 5: CONCLUSION

Reliability is an essential requirement for accounting information reported in financial statements. However, little is known about the unique case where firms have to declare that their financial statements should not be relied upon because of their own errors using a distinct and separate form.

Recent papers about firms' materiality judgment investigate SEC comment letters (Acito et al. 2015) and the internal materiality judgment guidance of the major accounting firms (Eilifsen and Messier 2015) to provide empirical evidence about the materiality judgment criteria firms and their auditors are using. Although the non-reliance judgment is related to materiality judgment, the immediate and prominent disclosure requirement of Item 4.02 in Form 8-K makes non-reliance judgment quite different from general materiality judgment.

Notwithstanding its importance and uniqueness, the general criteria of this non-reliance judgement is not documented yet. Using a comprehensive restatements database, I investigate the implied criteria firms use to make non-reliance judgment about the errors in their past financial statements.

In this paper, I find that firms' non-reliance judgments vary primarily in conjunction with quantitative and qualitative considerations, while other contextual considerations have a limited influence on this judgment. Specifically, annualized three-year quarterly net income is the significant quantitative criteria for firms' non-reliance judgment. Additionally, qualitative considerations such as the annual income trend (LOSS) and restatements characteristics also have significant effect on non-reliance judgment. Restatement characteristics except for the number of restatement reasons (NUMBER) are

all significant in explaining the judgment. Among the contextual considerations, industry accounting practice about 4.02-8K restatement, debt market considerations, and firm size have significant effect on the judgment. In contrast to Myers et al. (2013), I find that the contextual considerations have limited effect on 4.02-8K disclosure choice in restricted sample.

The non-reliance criteria I identified allow me to estimate the likelihood of 4.02-8K restatement disclosure choice, and calculate the Inverse Mills Ratio to control for the tendency of firms to select less prominent disclosure venues to avoid future litigation risk. Adopting the Heckman two-stage model, I find that a pronounced restatement disclosure venue such as 4.02-8K is more likely to be associated with future litigation risk after controlling for the magnitude of restatements and endogeneity issues, which sheds some light on the current popularity of non 4.02-8K restatements. This finding can be generalizable to sample that utilizes the three different prominent disclosure venues: periodic, amended, and 4.02-8K disclosure venue.

This paper provides the first empirical evidence about the determinants of firms' non-reliance judgment. This finding lays theoretical foundation for testing the effect of prominent disclosure on future litigation risk. For future research, the role of safe harbor on management disclosure decision-making, the market consequence of firms' non-reliance judgment, and the association between the specific characteristics of management and non-reliance judgement making might be potential research topics. Further, the SEC may want to provide detailed guideline about the non-reliance judgment to curb the firms' opportunistic disclosure venue choice.

APPENDIX:
Variable Definitions

Variable	Definition
DEPENDENT variables	
4.02-8K	Indicator variable that equals 1 if a restatement is disclosed in Item 4.02 Form 8-K, and 0 if a restatement is disclosed in "Amended" or "Periodic" SEC filings.
AMENDED	Indicator variable that equals 1 if restatement is disclosed in 10-K/A or 10-Q/A filings, and 0 if restatement is disclosed in "Periodic" 10-K or 10-Q SEC filings.
LITIGATION	Indicator variable that equals 1 if a restatement causes a securities class action lawsuits, and 0 otherwise.
QUANTITATIVE Consideration	
$\lvert RS\_ \rvert$	Absolute value of the misstated amount, which is the sum of changes in net income for all periods affected by a restatement. Zero is assigned if there is no impact, and missing value is assigned if the amount is not available.
$\lvert RS\_ANI \rvert$	Aggregate misstated amount scaled by the absolute value of annual net income reported at the beginning of fiscal year in which restatement occurred.
$\lvert RS\_A3NI \rvert$	Aggregate misstated amount scaled by one third of the sum of 3 absolute values of annual net income reported before the fiscal year in which restatement occurred.
$\lvert RS\_NQNI \rvert$	Aggregate misstated amount scaled by "normalized" quarterly net income, defined as larger of quarterly net income multiplied by 4 or 5% of total assets at the beginning of the fiscal quarter in which restatement occurred.
$\lvert RS\_N3QNI \rvert$	Aggregate misstated amount scaled by one third of the sum of 12 absolute values of quarterly net income reported before the fiscal quarter in which restatement occurred.
$\lvert RS\_ASALES \rvert$	Aggregate misstated amount scaled by sales reported at the beginning of fiscal year in which restatement occurred.
$\lvert RS\_EQUITY \rvert$	Aggregate misstated amount scaled by equities reported at the beginning of fiscal year in which restatement occurred.
$\lvert RS\_TA \rvert$	Aggregate misstated amount scaled by total assets reported at the beginning of fiscal year in which restatement occurred.
QUALITATIVE1 consideration – net income trends	
TREND_A	Indicator variable that equals 1 if net income at the end of fiscal year in which restatement occurred is less than that of previous fiscal year, and 0 otherwise.
LOSS_A	Indicator variable that equals 1 if net income at the end of fiscal year in which restatement occurred is negative, and 0 otherwise.

TREND_Q	Indicator variable that equals 1 if net income at the end of quarter in which restatement occurred is less than that of the previous year's same quarter, and 0 otherwise.
LOSS_Q	Indicator variable that equals 1 if net income at the end of quarter in which restatement occurred is negative, and 0 otherwise.
INCREASE	Indicator variable that equals 1 if restatement increases net income, and 0 otherwise.

QUALITATIVE2 consideration - restatement characteristics

FRAUD	Indicator variable that equals 1 if restatement identifies fraud, irregularities, and 0 otherwise.
SEC	Indicator variable that equals 1 if restatement identifies SEC investigation, and 0 otherwise.
NUMBER	The number of distinctive restatement reasons identified as accounting rule application failures, frauds, or errors.
CORE	Indicator variable that equals 1 if restatement is related to core accounts (revenue, expense, cost of goods sold), and 0 otherwise.
PERIOD	Natural log of days of period that is affected by the restatement.
SEVERITY	Index variable that takes on value from 0 to 5, which is the sum of two indicator variables that equal 1 if NUMBER or PERIOD is above 75% of each variable, and existing three indicator variables - FRAUD, SEC, and CORE.

CONTEXTUAL consideration

AUDITOR	Indicator variable that equals 1 if one of big four auditors is a auditor at the restatement filing date.
QUALITY	The absolute value of abnormal accruals, which are estimated in the cross-section for each year and 2-digit SIC code using modified Jones model (Dechow et al. 1995) and measured at the beginning of fiscal year in which restatement occurred.
PRACTICES	The proportion of 8-K disclosure announcement in the 2-digit SIC code industry during the sample period.
AUDITOR_CHG	Indicator variable that equals 1 if an outside auditing firm at the time of restatement announcement is different from one during the misstated period, and 0 otherwise.
LITIGATION_RISK	Indicator variable that equals 1 if a firm belongs to high litigation risk industry based on SIC code classification from Francis et al. (1994), and 0 otherwise.
DEBT_ISSUE	Three-year average of long term debt issuance (DLTIS in COMPUSTAT) divided by total asset surrounding the restatement announcement year.
STOCK_ISSUE	Three-year average of stock issuance (SSTK in COMPUSTAT) divided by total asset surrounding the restatement announcement year.
DEBT_MONITER	Indicator variable that equals 1 if a firm has an S&P domestic short- or long-term issuer credit rating during one year prior to restatement filing date, and 0 otherwise.
STOCK_MONITER	Indicator variable that equals 1 if a firm is covered by at least one analysts in I/B/E/S consensus forecast data during one year prior to restatement filing date, and 0 otherwise.

CEO incentives

CEO_INCENTIVES | The incentive ratio that captures a CEO's normalized compensation increase in response to 1% increase in the share price, which is measured as ONEPCT/(ONEPCT + SALARY +BONUS) (Bergstresser and Philippon 2006). ONEPCT is the increase of CEO compensation based on stock (SHARE) and options (OPTIONS) holdings in response to 1% increase of a firm's stock price (PRICE), which is equal to 0.01*PRICE*(SHARE+OPTIONS)

CEO_LOGHOLDINGS | Natural log of CEO's equity-based compensation, which is equal to the sum of in-the-money options and SHARE (Schrand and Zechman, 2012)

CEO_CHG | Indicator variable that equals 1 if CEO at the time of restatement announcement is different from one during the misstated period, and 0 otherwise.

CEO_OVER1 | CEO overconfidence indicator variable type 1 that equals 1 if the natural log of CEO's in-the-money unexercised exercisable options + 1 is greater than the industry median, and 0 otherwise.

CEO_OVER2 | CEO overconfidence indicator variable type 2 that equals 1 if at least three of five criteria are met; 1. Industry-adjusted excess investment is above the median, 2. Industry-adjusted net acquisitions is above the median, 3. Industry-adjusted debt to equity ratio is above the median, 4. Either convertible debt or preferred stock is used, 5. Dividend payout ratio is positive, and 0 otherwise.

OTHER CONTROL variables

LOSS | Indicator variable that equals 1 if a firm recorded loss in last three fiscal years before restatement, 0 otherwise.

GROWTH | Market-to-book ratio as growth opportunity at the beginning of the fiscal year in which restatement occurred.

SIZE | Natural log of total assets at the beginning of the fiscal year in which restatement occurred.

REPEAT | Indicator variable that equals 1 if a firm file restatement more than once during the sample period, and 0 otherwise.

LITIGATION variables

PROMINENCE | Index variable that equals 3 (high prominence) for restatements disclosed in item 4.02 Form 8-K, 2 (medium prominence) for restatements disclosed in amended SEC filing (e.g., 10-K/A or 10-Q/A), and 1 (low prominence) for restatements disclosed in periodic SEC filing (e.g., 10-K or 10-Q).

3DAY_RETURN | Compounded raw returns over the 3-day return around the restatement filing date.

PRIOR_RETURN | Compounded raw returns over one year before the restatement filing date, which ends at two days before the restatement filing date.

POST_RETURN | Compounded raw returns over 20 days after the restatement filing date, which starts at two days after the restatement filing date.

SHARE_TURN | Probability that a share is traded for one year period, which ends at two days before the restatement filing date.

FINANCIAL | Indicator variable that equals 1 if a firm's four digit SIC code is between 6000 -6999, and 0 otherwise.

REFERENCES

Acito, A. A., J. J. Burks, and W. B. Johnson. 2009. Materiality decisions and the correction of accounting errors. *The Accounting Review* 84 (3): 659–688.

Acito, A. A., J. J. Burks, and W. B. Johnson. 2015. The materiality of accounting errors: evidence from SEC comment letters and implications for research proxies. Working paper. Available at SSRN: http://ssrn.com/abstract=2605993

Ahmed, A.S., and S. Duellman. 2013. Managerial overconfidence and accounting conservatism. *Journal of Accounting Research* 51, 1–30.

AuditAnalytics. 2012. 2011 financial restatements: an eleven year comparison. Audit Analytics Databases. New York, NY: Alacra Store.

_____. 2015. 2014 financial restatements: a fourteen year comparison. Audit Analytics Databases. New York, NY: Alacra Store.

Bergstresser, D., and T. Philippon. 2006. CEO incentives and earnings management. *Journal of Financial Economics* 80, 511–529.

Donelson, D., J. McInnis, R. Mergenthaler, and Y. Yu. 2012. The timeliness of bad earnings news and litigation risk. *The Accounting Review* 87: 1967-1991.

Dorsey, L.M., 2006. Speech by SEC Staff: remarks before the 2006 AICPA national conference on current SEC and PCAOB developments. Available at: https://www.sec.gov/ news/ speech/ 2006/spch121206lmd.htm

Ernst & Young LLP (EY). 2009. SEC comment and trends: Technology industry supplement. Available at http://www.ey.com/Publication/vwLUAssetsAL/SECCommentsTrends_ BB1772 _Technology_June2009/$FILE/SECCommentsTrends_BB1772 _Technology_ June2009.pdf

_____. 2015. Accounting changes and error corrections. Available at http://www.ey.com/Publication/vwLUAssets/FinancialReportingDevelopments_B B2752_AccountingChangesErrorCorrections_18February2015/$FILE/FinancialR eportingDevelopments_BB2752_AccountingChangesErrorCorrections_18Februar y2015.pdf

Eilifsen, A., and W. F. Messier, Jr. 2015. Materiality guidance of the major public accounting firms. *Auditing: A Journal of Practice & Theory* 34(2): 3-26.

Lie, E. 2005. On the timing of CEO stock option awards. *Management Science* 51 (5): 802–812.

Field, L., M. Lowry, and Shu, S. 2005. Does disclosure deter or trigger litigation? *Journal of Accounting and Economics* 39, 487–507.

Files, R., E. P. Swanson, and Tse, S. 2009. Stealth disclosure of accounting restatements. *The Accounting Review* 84(5) 1495–1520.

_____, N. Y. Sharp, and A. Thompson, 2013. Empirical evidence on repeat restatements. *Accounting Horizons* March 2014, Vol. 28, No. 1, pp. 93-123.

Files, R. 2012. SEC enforcement: Does forthright disclosure and cooperation really matter? *Journal of Accounting and Economics* 53(1-2) 353–374.

Francis, J., D. Philbrick, and K. Schipper. 1994a. Shareholder litigation and corporate disclosures. *Journal of Accounting Research* 32,137–164.

Gleason, C., and L. Mills. 2002. Materiality and contingent tax liability reporting. *The Accounting Review* 77 (2): 317–342.

_____., N. T. Jenkins, and W. B. Johnson. 2008. The contagion effects of accounting restatements. *The Accounting Review* 83(1): 83–110.

Government Accountability Office (GAO). 2007. Financial Restatements: Update of Public Company Trends, Market Impacts, and Regulatory Enforcement Activities.

Heitzman, S., C. Wasley, and J. Zimmerman. 2010. The joint effects of materiality thresholds and voluntary disclosure incentives on firms' disclosure decisions. *Journal of Accounting and Economics* 49(1-2) 109–132.

Hennes, K., A. Leone, and B. Miller. 2008. The importance of distinguishing errors from irregularities in restatement research: The case of restatements and CEO/CFO turnover. *The Accounting Review* 83 (6): 1487-1519.

_____, _____, and _____. 2014. Determinants and market consequences of auditor dismissals after accounting restatements. The Accounting Review 89 (3): 1051-1082.

Hilary, G., and C. Hsu. 2011. Endogenous overconfidence in managerial forecasts. *Journal of Accounting and Economics* 51, 300–313.

Hirschey, M., K. R. Smith, and W. M. Wilson. 2010. Financial reporting credibility after SOX: Evidence from Restatements. Available at: http://ssrn.com/abstract¼41652982

Hribar, P., and H. Yang, 2016. CEO overconfidence and management forecasting. *Contemporary Accounting Research* 33(1): 204-227.

Keune, M. B., and K. M. Johnstone. 2012. Materiality judgments and the resolution of detected misstatements: The role of managers, auditors, and audit committees. *The Accounting Review* 87 (5): 1641–1677.

Kim, J-B., Z. Wang, and L, Zhang. 2015. CEO overconfidence and stock price crash risk Contemporary Accounting Research, Forthcoming.

Lerman, A., and J. Livnat. 2010. The new Form 8-K disclosures. Review of Accounting Studies 15(4): 752-778.

Liu, C., and H. F. Mittelstaedt. 2002. Materiality judgments and disclosure of retiree health care costs under SFAS No. 81. *Review of Accounting Studies* 7 (4): 405–434.

Messier, W., N. Martinov-Bennie, and A. Eilifsen. 2005. A review and integration of empirical research on materiality: two decades later. *Auditing: A Journal of Practice and Theory* 24, 153–187.

Myers, L., S. Schols, and N. Sharp. 2013. Restating under the radar? Determinants of restatement disclosure choices and the related market reactions. Working Paper. Available at SSRN: http://ssrn.com/abstract=1309786

Nelson, M., S. Smith, and Z-V. Palmrose. 2005. The effect of quantitative materiality approach on auditors' adjustment decisions. *The Accounting Review* 80: 897–920.

Palmrose, Z.-V., V. Richardson, and S. Scholz. 2004. Determinants of market reactions to restatement announcements. *Journal of Accounting and Economics* 37 (1): 59–89.

_____. and S. Scholz. 2004. The circumstances and legal consequences of non-GAAP reporting: Evidence from restatements. *Contemporary Accounting Research* 21 (1): 139–80.

Plumlee, M., and T. L. Yohn. 2014. An examination of managements' regulatory filing choices surrounding restatements. *Journal of Management Accounting Research*, forthcoming. Available at: http://www.aaajournals.org/doi/abs/10.2308/jmar-50744

PricewaterhouseCoopers LLP (PWC). 2014. Financial statement presentation. Available at http://www.pwc.com/en_US/us/cfodirect/assets/pdf/accounting-guides/pwc-guide-financial-statement-presentation-2014.pdf

Scholz, S. 2014. Financial restatement trends in the United States: 2003-2012. Center for Audit Quality. Available at http://www.thecaq.org/reports-and-publications/financial-restatement-trends-in-the-united-states-2003-2012/financial-restatement-trends-in-the-united-states-2003-2012

Schrand, C.M., and S.L.C. Zechman. 2012. Executive overconfidence and the slippery slope to financial misreporting. *Journal of Accounting and Economics* 53, 311–329.

Securities and Exchange Commission (SEC). 1999. Materiality. SEC Staff Accounting Bulletin No. 99. Washington, D.C.: SEC.

_____. 2002. Proposed Rule: Additional Form 8-K disclosure requirements and acceleration of filing Date. Washington, D.C.: SEC. Available at https://www.sec.gov/rules/proposed/33-8106.htm

_____. 2004a. Final rule: Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date. Washington, D.C.: SEC.

_____. 2004b. Current report on Form 8-K: Frequently asked questions. Washington, D.C.: SEC. Available at: https://www.sec.gov/ divisions/ corpfin/form8kfaq.htm

_____. 2006a. Considering the effects of prior year misstatements when quantifying misstatements in current year financial statements. Staff Accounting Bulletin No. 108 (SAB 108). Washington, D.C.: SEC.

_____. 2006b. Executive compensation and related person disclosure. Washington, D.C.: SEC. Available at https://www.sec.gov/rules/final/2006/33-8732a.pdf

Skinner, D.J. 1994. Why firms voluntarily disclose bad news. *Journal of Accounting Research* 32,38–60.

_____. 1997. Earnings disclosures and stockholder lawsuits. *Journal of Accounting and Economics* 23, 249–282.

KEUNHO PHILIP CHUNG

Von Allmen School of Accountancy

Gatton College of Business & Economics

University of Kentucky

EDUCATION

- M.B.A.

  UNIVERSITY OF UTAH, David Eccles School of Business

  Salt Lake City, Utah

ACADEMIC EXPERIENCE

- INSTRUCTOR

  University of Kentucky: Introduction to Financial Accounting

- RESEARCH ASSISTANT / TEACHING ASSISTANT

  University of Kentucky (2012 – 2015)

  University of Utah (2010 – 2012)

SCHOLARSHIP AND AWARD

- UNIVERSITY OF KENTUCKY

  Von Allmen School of Accountancy Scholarship (2012-2015)

  Luckett Fellowship (2012, 2014)

  Reedy Quality Achievement Award (2012 – 2014)

  Max Steckler Fellowship (2015)

- UNIVERSITY OF UTAH

  David Eccles School of Business Scholarship (2010 – 2012)