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# HIDING IN PLAIN SIGHT: STEALTH RESTATEMENTS AND THEIR IMPLICATION FOR LITIGATION RISK

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*This paper examines whether and to what extent the choice of disclosure channel of a company's financial restatement affects the litigation risk the company will face from shareholders. Since 2004, the Securities and Exchange Commission (SEC) has required firms to disclose any errors that will undermine investors' reliance on previously issued financial statements in Item 4.02 of Form 8-K. However, the determinants for when an error meets this criteria of "non-reliance" lack clear guidelines, raising concerns that firms are cloaking errors and mistakes through opaque disclosure channels ("stealth restatements") instead of the more prominent Form 8-K, as required by the SEC rule. This paper investigates the criteria that firms use to determine whether an error meets the "non-reliance" definition, and estimates the likelihood that the company will disclose the error in a particular way. Applying this estimation to securities class action litigation, with controls for restatement characteristics and potential self-selection biases, we find that a more prominent restatement disclosure channel is associated with higher future litigation risk. This finding provides a plausible explanation for the current popularity of so-called "stealth restatements" which lower the firm's litigation risk due to smaller price impact and the difficulty faced by shareholders in making the case for the class action certification. We conclude with implications of our results for practitioners and regulators.*

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## INTRODUCTION

The starting point for securities fraud litigation under Rule 10b-5[1]—promulgated by the SEC pursuant to the 1934 Exchange Act[2]—is an allegation by plaintiff that the defendant company misstated or omitted a material fact.[3] Misstatements may be related to a company's financial statements,[4] or any other significant matters such as a possible merger[5] or re-

1. 17 C.F.R. § 240.10b-5 (2018).

2. Securities Exchange Act of 1934 § 10b, 15 U.S.C. § 78j (2018).

3. The complete elements that plaintiffs are required to prove in a case under SEC Rule 10b-5 can be found in *Dura Pharmaceuticals, Inc v. Broudo*:

> In cases involving publicly traded securities and purchases or sales in public securities markets, the action's basic elements include: (1) a material misrepresentation (or omission), (2) scienter, i.e., a wrongful state of mind, (3) a connection with the purchase or sale of a security, (4) reliance, often referred to in cases involving public securities markets (fraud-on-the-market cases) as transaction causation, (5) economic loss, and (6) loss causation, i.e., a causal connection between the material misrepresentation and the loss.

544 U.S. 336, 341–42 (2005) (internal citations omitted).

4. For example, in *In re Burlington Coat Factory Securities Litigation*, the complaint made five allegations of misstatements in the company's financial statements: "(1) that BCF overstated certain quarterly earnings reports; (2) that BCF wrongfully failed to disclose the receipt of certain reduced discounts on purchases; (3) that BCF misrepresented the sales attributable to the 53rd week of 1993; and (4) & (5) that BCF made certain forward-looking statements without a reasonable basis." 114 F.3d 1410, 1418–19 (3d Cir. 1997).

5. For example, in *In re Sprint Corporation Securities Litigation*, plaintiffs allege that Sprint and WorldCom defendants perpetrated a fraud on the

search and development information.[6] As there are many types of misstatements, there are many ways in which the truth can bring the misstatement to light, including a subsequent corrective disclosure by the companies themselves. This article addresses misstatements and omissions in financial statements.

Firms have to restate their prior financial statements when they find material errors.[7] For example, if the earnings were materially misstated because of an error in a prior calculation or estimation method, the firm is required to restate its prior financial statements. There exist two restatement approaches: restatement with and without Form 8-K disclosure. Different disclosure channels for the restatement or correction of financial statements may elicit different stock market responses and thus, the disclosure channel choice can have a substantial effect on the company's litigation risk. This paper investigates whether different disclosure channels have different effects on future securities class action litigation risk.

In response to the "real-time issuer disclosure" mandate of Section 409 of the Sarbanes–Oxley Act of 2002,[8] the SEC issued a release mandating additional Form 8-K disclosures

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market in an attempt to gain shareholder approval of the merger, despite the fact that the merger was destined from the beginning to fail. 232 F. Supp. 2d 1193, 1202 (D. Kan. 2002).

6. For example, in *Dura Pharmaceuticals, Inc v. Broudo*, the company falsely stated that the corporation's pharmaceutical spray device would receive federal approval. 544 U.S. at 339.

7. Such errors may include "[a]n error in recognition, measurement, presentation, or disclosure in financial statements resulting from mathematical mistakes, mistakes in the application of generally accepted accounting principles (GAAP), or oversight or misuse of facts that existed at the time the financial statements were prepared." ACCOUNTING STANDARDS CODIFICATION § 250-10-20 (Fin. Accounting Standards Bd. 2009). As for a materiality determination, the Federal Accounting Standards Board ("FASB") notes that:

> [F]or the purpose of reporting the correction of an error, amounts shall be related to the estimated income for the full fiscal year and also to the effect on the trend of earnings. Changes that are material with respect to an interim period but not material with respect to the estimated income for the full fiscal year or to the trend of earnings shall be separately disclosed in the interim period.

*Id.* § 250-10-45-27.

8. Sarbanes–Oxley Act of 2002, Pub. L. No. 107-204, § 409, 15 U.S.C. § 7201 (2002).

and accelerating of filing date (the "Final Rule")[9] in August 2004.[10] The Final Rule requires all of the following to be disclosed: (1) entry into a material definitive agreement not made in the regular course of business; (2) termination of a material definitive agreement not made in the regular course of business; (3) formation of a material direct financial obligation or an obligation under an off-balance sheet arrangement; (4) events that accelerate or increase a direct financial commitment or an off-balance sheet obligation when the consequences are material; (5) decisions to exit a business or dispose of a material asset and the associated costs; (6) a company's conclusion that a material asset impairment charge will be required under generally accepted accounting practices; (7) notice from a national securities exchange or national securities association concerning delisting or failure to satisfy a continued listing rule or standard or a transfer of listing; and, in particular, (8) the conclusion by the company, or any notification from the company's independent accountants, that the public should no longer rely on previously issued financial statements, or on any interim review, because of an error in any of those statements.[11]

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,[12] defined as the date when the firm or its auditor con-

9. Final Rule: Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date, Exchange Act Release No. 33-8400, 69 Fed. Reg. 15,594 (Mar. 16, 2004) [hereinafter Final Rule on Form 8-K].

10. For a discussion of the efficacy of the 8-K disclosure requirements prior to adoption of the Final Rule in 2004, see Jennifer B. Lawrence & Jackson W. Prentice, *The SEC Form 8-K: Full Disclosure of Fully Diluted? The Question for Improved Financial Market Transparency*, 41 WAKE FOREST L. REV. 913 (2006).

11. *See* Final Rule on Form 8-K, *supra* note 9.

12. Item 4.02 stipulates the requirements for non-reliance on previous issued financial statements or a related audit report or completed interim review:

> (a) If the registrant's board of directors, a committee of the board of directors or the officer or officers of the registrant authorized to take such action if board action is not required, concludes that any previously issued financial statements, covering one or more years or interim periods for which the registrant is required to provide financial statements under Regulation S-X (17 CFR 210) or Regulation S-B (17 CFR 228), should no longer be relied upon because of an error in such financial statements as addressed in Accounting

cludes that the previously issued financial statements "no longer should be relied upon because of an error in such financial statements."[13] 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 ("4.02–8K restatements").

4.02–8K restatement disclosure was 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."[14] Firms are not required to use 4.02–8K restatements if they conclude that errors in the previously issued financial statements do not undermine investors' reliance on these financial statements.

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> Principles Board Opinion No. 20, as may be modified, supplemented or succeeded, disclose the following information:
>
> > (1) the date of the conclusion regarding the non-reliance and an identification of the financial statements and years or periods covered that should no longer be relied upon;
> >
> > (2) a brief description of the facts underlying the conclusion to the extent known to the registrant at the time of filing; and
> >
> > (3) a statement of whether the audit committee, or the board of directors in the absence of an audit committee, or authorized officer or officers, discussed with the registrant's independent accountant the matters disclosed in the filing pursuant to this Item 4.02(a).
>
> (b) If the registrant is advised by, or receives notice from, its independent accountant that disclosure should be made or action should be taken to prevent future reliance on a previously issued audit report or completed interim review related to previously issued financial statements, disclose the following information:
>
> > (1) the date on which the registrant was so advised or notified;
> >
> > (2) identification of the financial statements that should no longer be relied upon;
> >
> > (3) a brief description of the information provided by the accountant; and
> >
> > (4) a statement of whether the audit committee, or the board of directors in the absence of an audit committee, or authorized officer or officers, discussed with the independent accountant the matters disclosed in the filing pursuant to this Item 4.02(b).

*Id.* at 15,603.

13. *Id.* at 15,604.

14. *Id.* at 15,594–95.

However, the absence of bright-line guidance as to what constitutes the non-reliance judgment results in diverse interpretations and applications of this disclosure regulation, raising the concern that firms are opportunistically applying the disclosure regulation to keep their errors and mistakes "under the [regulatory] radar."[15] According to Susan Scholz, firms are increasingly restating their previous financial statements directly through periodic filings (10-K or 10-Q) or amended filings (10-K/A or 10-Q/A) without filing a Form 8-K first.[16] This approach is referred to as a "stealth restatement"[17] because rather than a stand-alone, very prominent disclosure of a material misstatement, the firm includes the restatement in its regular filings as simply one amongst many other items.

A "stealth restatement" may well be an indication that management not only was aware of the material error in previous financial statements, but intentionally chose to disregard the Form 8-K disclosure requirement in an attempt to hide the error from investors. This argument has great implications for securities fraud suits because evidence of the intent to deceive—the "scienter"[18]—is one of the most difficult elements to prove in a securities fraud case.[19]

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15. Linda A. Myers, Susan Scholz & Nathan Y. Sharp, Restating Under the Radar? Determinants of Restatement Disclosure Choices and the Related Market Reactions (Apr. 1, 2013) (unpublished comment based on Nathan Sharp's dissertation, University of Texas), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1309786 (arguing that some firms continue to disclose severe restatements in the most obscure disclosure channel, i.e., in regular periodic filings to the SEC (10-K or 10-Q)).

16. Susan Scholz, *Financial Restatement Trends in the United States: 2003–2012*, CTR. FOR AUDIT QUALITY (July 24, 2014), http://www.thecaq.org/reports-and-publications/financial-restatement-trends-in-the-united-states-2003-2012.

17. We term these kinds of restatements as non 4.02–8K restatements. Such restatements are also known as "stealth restatements," "revision restatements," or "non 4.02 restatements."

18. Scienter means "knowingly." The term is frequently used to signify the defendant's guilty knowledge, or, in the context of securities fraud, means "a mental state consisting in an intent to deceive, manipulate, or defraud." *Scienter,* BLACK'S LAW DICTIONARY (10th ed. 2014).

19. *In re* PDI Sec. Litig., 2006 U.S. Dist. LEXIS 80142 (D.N.J. 2006).

## I.
## MATERIALITY AND LITIGATION RISK

### A. *Materiality and Non-Reliance Judgment*

The seminal case for defining materiality in securities law is *TSC Industries v. Northway*,[20] in which the Supreme Court stated that a fact is material if there is a "substantial likelihood that disclosure of the omitted fact would have been viewed by the reasonable investor of having significantly altered the 'total mix' of information made available."[21] This definition has been adopted by the SEC in SEC Staff Accounting Bulletin ("SAB") No. 99 (1999), which defines a matter as material "if there is a substantial likelihood that a reasonable person would consider it important."[22] Federal Accounting Standards Board ("FASB") defines materiality as "the magnitude of an omission or misstatement of accounting information that, in the light of surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the information would have been changed or influenced by the omission or misstatement."[23] The FASB said the definition under Concepts No. 2 is consistent with the definition used by the SEC, the Public Company Accounting Oversight Board ("PCAOB"), and the American Institute of Certified Public Accountants ("AICPA").[24] Although these definitions are similar, no clear threshold exists for the determination of a distinction between immaterial and material issues. In practice, however, a "five

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20. TSC Indus., Inc., v. Northway, 426 U.S. 438 (1976).

21. *Id.* at 449.

22. SEC Staff Accounting Bulletin No. 99, 64 Fed. Reg. 45,150 (Aug. 12, 1999).

23. FIN. ACCOUNTING STANDARDS BD., STATEMENT OF FINANCIAL ACCOUNTING CONCEPTS NO. 2 — QUALITATIVE CHARACTERISTICS OF ACCOUNTING INFORMATION (1980). This Concepts Statement was superseded in 2010 by FIN. ACCOUNTING STANDARDS BD., STATEMENT OF FINANCIAL ACCOUNTING CONCEPTS NO. 8 (2010); however, in 2017, FASB amended the definition of materiality with language similar to that of the definition in FASB's Concepts Statement No. 2. *See Financial Accounting Standards Board Tentative Board Decisions*, FIN. ACCOUNTING STANDARDS BD. (Nov. 8, 2017), https://www.fasb.org/jsp/FASB/FASBContent_C/ActionAlertPage&cid=1176169442224&rss=1.

24. Gregory Pun, *US Corporate Law News: FASB Drops Plan to Conform US-GAAP Definition of Materiality to Judicial Definition* (Nov. 26, 2017), https://www.withersworldwide.com/en-gb/fasb-drops-plan-to-conform-us-gaap-definition-of-materiality-to-judicial-definition.

percent of income" threshold is widely acknowledged as a "rule of thumb" benchmark[25] for the materiality threshold in literature and practice. While this threshold is recognized as a starting point, the SEC warns that "quantifying, in percentage terms, the magnitude of a misstatement is only the beginning of an analysis of materiality; it cannot appropriately be used as a substitute for a full analysis of all relevant considerations."[26] Thus, courts make materiality determinations on a case-by-case basis.[27]

According to the SEC, the two main objectives of securities law are to insure "that investors receive financial and other significant information concerning securities being offered for public sale," and to "prohibit deceit, misrepresentations, and other fraud in the sale of securities."[28] In keeping with its reliance on disclosure as a primary means of investor protection, the SEC amended 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 following a triggering event.[29] 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

25. SEC Staff Accounting Bulletin No. 99, *supra* note 22, at 45,151 ("The use of a percentage as a numerical threshold, such as 5%, may provide the basis for a preliminary assumption that—without considering all relevant circumstances—a deviation of less than the specified percentage with respect to a particular item on the registrant's financial statements is unlikely to be material. The staff has no objection to such a 'rule of thumb' as an initial step in assessing materiality."). *See also* James J. Park, *Assessing the Materiality of Financial Misstatements*, 34 IOWA J. CORP. L. 513, 517 (2009).

26. SEC Staff Accounting Bulletin No. 99, *supra* note 22, at 45,151 ("But quantifying, in percentage terms, the magnitude of a misstatement is only the beginning of an analysis of materiality; it cannot appropriately be used as a substitute for a full analysis of all relevant considerations.").

27. *See* Basic, Inc. v. Levinson, 485 U.S. 224, 250 (1988).

28. *The Laws That Govern the Securities Industry*, SEC. & EXCH. COMM'N (Oct. 1, 2013), https://www.sec.gov/about/laws.shtml.

29. Final Rule on Form 8-K, *supra* note 9.

> 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.[30]

Those revisions include the conclusion by the company, or any notification from the company's independent accountants, that the public should no longer rely on previously issued financial statements, or on any interim review, because of an error in any of those statements.[31]

Determining whether the error must be disclosed under this process is a two-step process. First, management must exercise its own judgment in determining whether an error in the financial statements is material, and second, whether the error is such that shareholders should not rely on the financial statements containing the error (the non-reliance judgment).

### B. *4.02–8K Restatement Requirement*

Any accounting errors and mistakes in prior financial statements resulting from mathematical mistakes, Generally Accepted Accounting Principles (GAAP) misapplication, or ignorance of facts should be corrected and reported by restating the prior statements.[32] However, the restatement process varies depending on the different levels of materiality of errors.

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30. *Id.* at 15,594–95 (emphasis added). *But see* Lawrence & Prentice, *supra* note 10, at 913 (finding in a study of the prior 8-K disclosure requirements before the Final Rule that "there has been little subsequent market reaction to individual 8-K filings . . . [which] seemingly substantiates the theory that the new real-time disclosure regime has had the unintended effect of diluting financial information while desensitizing market investors.").

31. *See supra* note 12 and accompanying text.

32. For example, the Financial Accounting Standards Board instructs that:

> Any error in the financial statements of a prior period discovered after the financial statements are issued or are available to be issued shall be reported as an error correction, by restating the prior-period financial statements. Restatement requires all of the following:
>
> a. The cumulative effect of the error on periods prior to those presented shall be reflected in the carrying amounts of assets and liabilities as of the beginning of the first period presented.
>
> b. An offsetting adjustment, if any, shall be made to the opening balance of retained earnings (or other appropriate components of equity or net assets in the statement of financial position) for that period.

FASB provides an exception that if the error is deemed immaterial by management, it needs not be corrected at all.[33] The material error must be corrected and then the error correction should be disclosed through companies' SEC filings. An error that, in management's judgment, is so significant that shareholders cannot rely on the financial statements must be disclosed within four days through Form 8-K, instead of periodic or amended SEC filings.

Before the Final Rule, financial statements users could only identify a firm's material accounting error after the firm disclosed it in periodic or amended filings, with the exception of when a firm used the voluntary Form 8-K disclosure or press release about the error identified.[34] After the SEC Final Rule mandating additional Form 8-K disclosures, firms must decide whether the past financial statements which contain material errors can still *be relied upon*; if not, the firm must disclose the errors and restatements using 4.02–8K disclosure within four business days of this decision.[35]

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> c. Financial statements for each individual prior period presented shall be adjusted to reflect correction of the period-specific effects of the error.

ACCOUNTING STANDARDS CODIFICATION § 250-10-45-23 (Fin. Accounting Standards Bd. 2009).

33. *See id.* § 105-10-05-6 ("The provisions of the Codification need not be applied to immaterial items.").

34. A proposed rule from 2002 explains that:

> Form 8-K currently consists of nine disclosure items. Six of the items describe specific events that require companies to file Form 8-K. Those events are: A change in control of the company; The company's acquisition or disposition of a significant amount of assets; The company's bankruptcy or receivership; A change in the company's certifying accountant; The resignation of a company director; and A change in the company's fiscal year. A seventh item requires companies to furnish exhibits and to list any financial statements and pro forma financial information included as part of Form 8-K in connection with a business acquisition. Another item permits companies, at their option, to disclose events that they deem to be of importance to their shareholders. The ninth item permits companies to use Form 8-K as a non-exclusive method to satisfy their public disclosure requirements under Regulation FD.

Proposed Rule on Form 8-K, Exchange Act Release No. 33-8106, 67 Fed. Reg. 42,914 (June 17, 2002).

35. Final Rule on Form 8-K, *supra* note 9.

The Final Rule does contain a safe harbor provision for several Form 8-K items.[36] The safe harbor provision states that "no failure to file a report on Form 8-K that is required solely pursuant to the provisions of Form 8-K shall be deemed to be a violation of Section 10(b) and Rule 10b-5 under the Exchange Act."[37] This provision even allows companies to disclose some Form 8-K items in periodic reports such as 10-Q or 10-K if companies fail to file a Form 8-K within the designated time.[38] However, in case of Item 4.02, the non-reliance judgment, the safe harbor provision applies only during the time when "a company makes the determination and does not receive a notice described in Item 4.02(b) from its accountant."[39] The SEC further clarified the limitation of this safe harbor provision for item 4.02 by stating that:

> The registrant may disclose triggering events, other than Items 4.01 and 4.02 events, on the periodic report under Revised Item 5 of Part II of Forms 10-Q and 10-QSB and Item 9B of Form 10-K and Item 8B of Form 10-KSB, as applicable. *All Item 4.01 and Item 4.02 events must be reported on Form 8-K.* Of course,

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36. The Final Rule provides that:

> As a result, we have decided to adopt a new limited safe harbor from public and private claims under Exchange Act Section 10(b) and Rule 10b-5 for a failure to timely file a Form 8-K regarding the following items:
>
> Item 1.01 Entry into a Material Definitive Agreement
>
> Item 1.02 Termination of a Material Definitive Agreement
>
> Item 2.03 Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant
>
> Item 2.04 Triggering Events that Accelerate or Increase a Direct Financial Obligation under an Off-Balance Sheet Arrangement
>
> Item 2.05 Costs Associated with Exit or Disposal Activities
>
> Item 2.06 Material Impairments
>
> Item 4.02(a)spnNon-Reliance on Previously Issued Financial Statements or a Related Audit Report or Completed Interim Review (in the case where a company makes the determination and does not receive a notice described in Item 4.02(b) from its accountant)

*Id.* at 15,607.

37. *Id.*

38. *Id.*

39. *Id.*

> amendments to previously filed Forms 8-K must be filed on a Form 8-K/A.[40]

### C. *Price Impact and Litigation Risk*

The restatement using 4.02–8K disclosure is a very prominent indication that a material error has been made and that the error is so significant that the public can no longer rely on the financial statements. Management, therefore, is likely to be reticent to disclose an error through this channel, as it may invite greater attention to the error, cause severe stock market response, and possibly lead to litigation. The negative price impact induced by 4.02–8K disclosure is one of the main driving factors for the litigation risk because stock market response is closely related to three key legal issues in securities class action suits: materiality, reliance, and loss causation.

First, the stock market response to a restatement announcement can be a proxy for materiality. To prove materiality of errors, plaintiffs do not need to demonstrate that *all* investors change their minds upon receiving the restatement news. If there is no price impact, however, the fact cannot be material.[41] Richard Booth further asserts that "the court has indicated repeatedly since *Basic* that in the context of a securities fraud class action under Rule 10b-5, the plaintiff must show price impact in order to show materiality."[42]

Second, price impact is a cornerstone of the fraud on the market ("FOTM") theory, under which the presumption of investors' reliance on the materially misleading statements applies to the extent that the stock is traded on an "impersonal, well-developed market for securities."[43] In *Basic*, the Supreme Court stated that:

> Presumptions typically serve to assist courts in managing circumstances in which direct proof, for one reason or another, is rendered difficult. The courts below accepted a presumption, created by the fraud-on-

40. *Current Report on Form 8-K Frequently Asked Questions*, Sec. & Exch. Comm'n (Nov. 23, 2004), https://www.sec.gov/divisions/corpfin/form8kfaq.htm (emphasis added).

41. *See* Basic, Inc. v. Levinson, 485 U.S. 224, 247.

42. *See* Richard A. Booth, *The Two Faces of Materiality*, 38 DEL. J. CORP. L. 517, 522 (2013).

43. *See Basic*, 485 U.S. at 247.

> the-market theory and subject to rebuttal by petitioners, that persons who had traded Basic shares had done so in reliance on the integrity of the price set by the market, but because of petitioners' material misrepresentations that price had been fraudulently depressed. Requiring a plaintiff to show a speculative state of facts, i.e., how he would have acted if omitted material information had been disclosed, or if the misrepresentation had not been made, would place an unnecessarily unrealistic evidentiary burden on the Rule 10b-5 plaintiff who has traded on an impersonal market.[44]

In *Halliburton Co. v. Erica P. John Fund, Inc.*,[45] the Supreme Court confirmed the FOTM theory established in *Basic* and emphasized the role of price impact in an FOTM application. More importantly, the Court clarified that defendants can rebut the reliance at the class certification stage. Chief Justice Roberts in *Halliburton* expressed the opinion of the Court:

> In *Basic Inc. v. Levinson*, we held that investors could satisfy this reliance requirement by invoking a presumption that the price of stock traded in an efficient market reflects all public, material information—including material misstatements. In such a case, we concluded, anyone who buys or sells the stock at the market price may be considered to have relied on those misstatements.
>
> We also held, however, that a defendant could rebut this presumption in a number of ways, including by showing that the alleged misrepresentation did not actually affect the stock's price—that is, that the misrepresentation had no "price impact." The questions presented are whether we should overrule or modify Basic's presumption of reliance and, if not, whether defendants should nonetheless be afforded an opportunity in securities class action cases to rebut the presumption at the class certification stage, by showing a lack of price impact.[46]

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44. *Id.* at 245 (citations omitted).
45. Halliburton Co. v. Erica P. John Fund, Inc., 134 S. Ct. 2398 (2014).
46. *Id.* at 2405 (2014) (citations omitted).

The *Halliburton* court concluded that it found "no reason to artificially limit the inquiry at the certification stage to indirect evidence of price impact. Defendants may seek to defeat the *Basic* presumption at that stage through direct as well as indirect price impact evidence."[47]

Third, the plaintiffs can prove the causation between loss and the material misstatement by showing the price impact resulting from the restatement announcement.[48] The loss can be proven by showing that a stock was purchased at inflated price due to misstated information and sold at declined price after the emergence of the truth. Courts consistently ruled that the "inflated purchase price" approach alone cannot satisfy loss causation,[49] because if the stock were sold before the corrective disclosure, the misrepresentation could not cause the loss.[50] Therefore, the price decline can provide indirect evidence to show that stock price was inflated due to the misstatement or omission of material information.[51]

### D. *Hypothesis*

As noted above, price impact is positively associated with securities class action litigation risk through its relationship to key legal concepts. However, it is not easy to identify whether and when a material factor had an effect on the stock price. Stock prices reflect all information available at a point in time. If several major issues are disclosed at the same time, the stock price may not be affected because good news may cancel out bad news. Furthermore, if the truth about the material misstatement is partially revealed or revealed without corrective disclosure, it is difficult to identify when the stock price is affected by the material facts.[52]

The 4.02–8K disclosure requirement provides a unique setting to identify the price impact of a material misstatement

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47. *Id.* at 2417.

48. Andrew M. Erdlen, *Timing Is Everything: Markets, Loss, and Proof of Causation in Fraud on the Market Actions*, 80 FORDHAM L. REV. 877 (2011).

49. Emergent Capital Inv. Mgmt., LLC v. Stonepath Grp., Inc., 343 F.3d 189, 197 (2d Cir. 2003); Semerenko v. Cendant Corp., 223 F.3d 165, 185 (3d Cir. 2000); Robbins v. Koger Props., 116 F.3d 1441, 1447–48 (11th Cir. 1997).

50. Dura Pharm., Inc. v. Broudo, 544 U.S. 336, 343 (2005).

51. *See Current Report on Form 8-K Frequently Asked Questions*, *supra* note 40.

52. *Dura Pharm.*, 544 U.S. at 343.

on the market, because the corrective disclosure must itemize and provide details about the misstatements or omission of material issues in the prior financial statement.[53]

Using a comprehensive restatements sample, this paper hypothesizes that the prominent 4.02–8K disclosure channel will have higher likelihood of future litigation risk compared to less prominent disclosure channels such as periodic or amended restatements (non-4.02–8K restatements). Therefore, our hypothesis in alternative form is: *4.02–8K restatement disclosure is positively associated with future securities class action lawsuits risk.*

## II. DATA AND RESEARCH DESIGN

### A. *Sample*

We obtained an initial sample of 10,406 accounting restatements announced between August 2004 and December 2013 from the Audit Analytics database.[54] We excluded 1553 restatements observations because these restatements were first disclosed in forms other than 8-K, 8-K/A, 10-K, 10-K/A,

53. The Final Rule requires that the company disclose:

> (1) The date of the conclusion regarding the non-reliance and an identification of the financial statements and years or periods covered that should no longer be relied upon.
> (2) A brief description of the facts underlying the conclusion to the extent known to the registrant at the time of filing; and
> (3) A statement of whether the audit committee, or the board of directors in the absence of an audit committee, or authorized officer or officers, discussed with the registrant's independent accountant the matters disclosed in the filing pursuant to this Item 4.02(a).

Final Rule on Form 8-K, *supra* note 9, at 15,625. Similar disclosure is required if the company is notified by its accountant of a material error that requires restatements. *Id.* at 15,603.

54. Brendan Hannen, *Different Types of Financial Statement Error Corrections*, AUDIT ANALYTICS (May 24, 2013), https://www.auditanalytics.com/blog/different-types-of-financial-statement-error-corrections/ (defining 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.

10-Q, or 10-Q/A.[55] Restatements filed by firms not covered by Compustat and CRSP database were also eliminated. This sample selection process resulted in 3,431 observations.

Panel A in Table 1 shows the decreasing trend in the number of total restatement disclosures and the 4.02–8K restatements. The proportion of 4.02–8K restatements over total restatements (4.02–8K/N) shrinks from 75.8% in 2005 to 24.2% in 2013, consistent with concerns that more firms are evading the Form 8-K disclosure requirements. Panel B reports the price impact by different disclosure channels. As expected, the frequency of 4.02–8K restatement increases as the negative price impact of corrective disclosure increases. Specifically, the proportion of 4.02–8K restatement over total restatements (4.02–8K/N) increases from 50.6% to 69.1% as the negative price impact (NPI) increases up to 30%. Restatements can have positive price impact if they are related to positive news. For example, a company may have to restate its prior financial statement because it underestimated future operating performance and earnings. In this case, the price impact would be positive.

**TABLE 1: Sample**

**Panel A: Sample Frequency by Year and by Channels**

| Year | 4.02–8K | Non-4.02–8K | N | 4.02–8K/N |
|---|---|---|---|---|
| 2004 | 101 | 37 | 138 | 73.2% |
| 2005 | 470 | 150 | 620 | 75.8% |
| 2006 | 370 | 205 | 575 | 64.3% |
| 2007 | 256 | 166 | 422 | 60.7% |
| 2008 | 158 | 139 | 297 | 53.2% |
| 2009 | 117 | 100 | 217 | 53.9% |
| 2010 | 99 | 144 | 243 | 40.7% |
| 2011 | 86 | 184 | 270 | 31.9% |
| 2012 | 73 | 246 | 319 | 22.9% |
| 2013 | 80 | 250 | 330 | 24.2% |
| Total | 1,810 | 1,621 | 3,431 | 52.8% |

NOTE: 2004 data includes restatements announced after SEC Final Rule (Aug. 2004). N is the total number of restatements, that is, the sum of 4.02–8K restatements and Non-4.02–8K restatements.

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55. *Forms List*, SEC. & EXCH. COMM'N, https://www.sec.gov/forms (last visited Nov. 5, 2018). 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. NT 10-K(Q) is required when firms are not able to file 10-K(Q) in time.

**Panel B: Price Impact by Channels**

| Negative Price Impact (NPI) | 4.02–8K | Non-4.02–8K | N | 4.02–8K/N |
|---|---|---|---|---|
| NPI ≤ 0% | 684 | 669 | 1,353 | 50.6% |
| 0% < NPI ≤ 10% | 782 | 648 | 1,430 | 54.7% |
| 10% < NPI ≤ 20% | 119 | 77 | 196 | 60.7% |
| 20% < NPI ≤ 30% | 47 | 21 | 68 | 69.1% |
| Total | 1,632 | 1,415 | 3,047 | 53.6% |

NOTE: The number of observations in Panel B is less than Panel A by 384 (= 3,431 – 3,047), because stock price information is not available for these observations. Negative price impact ("NPI") is calculated by multiplying price impact by -1, indicating that the higher NPI, the more negative the price impact of restatement announcement on stock market.

In Table 2, we present the frequency of securities class action lawsuits by the prominence of restatement disclosure channels (Panel A), by the severity of restatements (Panel B), and by price impact of restatement disclosure (Panel C). The Audit Analytics restatements database reports whether a specific restatement is related to securities class action litigation (LIT). In addition, we searched the dismissed cases from the Securities Class Action Clearinghouse[56] and added the results in the separate column (DIS). LIT/N column shows the proportion of lawsuit-related restatements over total restatements disclosure. DIS/LIT column indicates the proportion of dismissed lawsuits over total lawsuits.

**TABLE 2: Securities Class Action Litigation Risk Analysis**

**Panel A: Litigation Risk by Channels**

| Channels | N | LIT | DIS | LIT/N | DIS/LIT |
|---|---|---|---|---|---|
| Non-4.02–8K | 1,621 | 243 | 70 | 15.0% | 28.8% |
| 4.02–8K | 1,810 | 288 | 85 | 15.9% | 29.5% |
| Total | 3,431 | 531 | 155 | 15.5% | 29.2% |

56. *Securities Class Action Clearinghouse*, STAN. L. SCH., http://securities.stanford.edu (last visited Nov. 5, 2018, 4:58 PM). This database includes a filings list, fillings by year, and filings by Circuit. The case status (e.g., dismissal) is available under each case's summary.

**Panel B: Litigation Risk by Severity**

| SEVERITY | N | LIT | DIS | LIT/N | DIS/LIT |
|---|---|---|---|---|---|
| 0 | 1,577 | 191 | 50 | 12.1% | 26.2% |
| 1 | 1,188 | 189 | 61 | 15.9% | 32.3% |
| 2 | 505 | 109 | 35 | 21.6% | 32.1% |
| 3 | 135 | 35 | 8 | 25.9% | 22.9% |
| 4 | 20 | 5 | 1 | 25.0% | 20.0% |
| 5 | 6 | 2 | 0 | 33.3% | 0.0% |
| Total | 3,431 | 531 | 155 | 15.5% | 29.2% |

**Panel C: Litigation Risk by Price impact**

| Negative Price Impact (NPI) | N | LIT | DIS | LIT/N | DIS/LIT |
|---|---|---|---|---|---|
| NPI ≤ 0% | 1,353 | 191 | 55 | 14.1% | 28.8% |
| 0% < NPI ≤ 10% | 1,430 | 210 | 67 | 14.7% | 31.9% |
| 10% < NPI ≤ 20% | 196 | 52 | 14 | 26.5% | 26.9% |
| 20% < NPI ≤ 30% | 68 | 31 | 6 | 45.6% | 19.4% |
| Total | 3,047 | 484 | 142 | 15.9% | 29.3% |

NOTE: N is the number of restatements related to each category. LIT is the number of lawsuits-related restatements. DIS is the number of dismissed lawsuits. LIT/N is the proportion of lawsuits-related restatements. DIS/LIT is the proportion of dismissed lawsuits over lawsuits-related restatements.

Panel A in Table 2 shows the proportion of litigation related restatements depending on different disclosure channels. On average, 15.5% of restatements are associated with securities class action lawsuits and 29.2% of these suits are dismissed. Simple statistics report that the litigation risk of 4.02–8K is slightly higher than that of non-4.02–8K (15.9% vs. 15.0%). Panel B reports that litigation risk (LIT/N) monotonically increases from 12.1% to 33.3% as the seriousness of restatements (SEVERITY)[57] increases. The frequency of dismissed case (DIS/LIT) generally decreases as the severity of restatements increases. Panel C shows the litigation risk ac-

57. SEVERITY is a composite index variable that has a value from zero to five depending on the severity of restatements. *See infra* note 69 and accompanying text.

cording to the price impact. As the negative price impact (NPI) increases, the future litigation risk (LIT/N) exponentially increases from 14.1% to 45.6%, and the dismissed case (DIS/LIT) decreases as the negative price impact increases except for the positive price impact interval.

### B. *Non-Reliance Judgment Criteria*

Following the SEC guidelines,[58] we constructed categories based on quantitative, qualitative, and other considerations that firms are likely to use to make a non-reliance judgment. The quantitative category measures the size of errors for non-reliance judgment. If the error is relatively large compared to a company's size or income, it is more likely material. We tested seven different denominators to divide the misstated amount,[59] and chose the one denominator that can best be a proxy for the quantitative consideration of non-reliance judgment.

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58. SEC Staff Accounting Bulletin No. 99 provides that:

> Among the considerations that may well render material a quantitatively small misstatement of a financial statement item are— Whether the misstatement arises from an item capable of precise measurement or whether it arises from an estimate and, if so, the degree of imprecision inherent in the estimate. whether the misstatement masks a change in earnings or other trends. Whether the misstatement hides a failure to meet analysts' consensus expectations for the enterprise. Whether the misstatement changes a loss into income or vice versa. Whether the misstatement concerns a segment or other portion of the registrant's business that has been identified as playing a significant role in the registrant's operations or profitability. Whether the misstatement affects the registrant's compliance with regulatory requirements. Whether the misstatement affects the registrant's compliance with loan covenants or other contractual requirements. Whether the misstatement has the effect of increasing management's compensation—for example, by satisfying requirements for the award of bonuses or other forms of incentive compensation. Whether the misstatement involves concealment of an unlawful transaction. This is not an exhaustive list of the circumstances that may affect the materiality of a quantitatively small misstatement.

SEC Staff Accounting Bulletin No. 99, *supra* note 22, at 45,152.

59. Specifically, annual net income, annualized three-year net income, normalized quarterly net income, annualized twelve-quarter net income, annual sales, equity, and total assets are used to normalize the size of absolute value of misstated amount.

The second category is related to qualitative considerations of income trends at the time of restatement disclosure. Specifically, we adopted benchmarks measuring whether the restatements are associated with annual net income trend change (TREND),[60] annual loss at the end of period (LOSS),[61] and positive effect on net income in the misstated period (INCREASE).[62] Because the effect of restatements on these variables is indirect, we had no prior prediction about the coefficient estimates.

The third consideration category is the characteristics of restatements. Following prior research,[63] we used six variables to measure the characteristics and severity of restatements: restatements related to fraud (FRAUD),[64] SEC investigation (SEC),[65] the number of issues involved in the restatements (NUMBER),[66] one of the core accounts such as revenue, expense, or cost of goods sold (CORE),[67] the misstated period (PERIOD),[68] and a composite index variable, which has a value from zero to five depending on the severity of restatements (SEVERITY).[69] We expect all six variables to have a

60. TREND is an indicator variable that equals one if net income at the end of fiscal year in which restatement occurred is less than that of previous fiscal year, and zero otherwise.

61. LOSS is an indicator variable that equals one if net income at the end of fiscal year in which restatement occurred is negative, and zero otherwise.

62. INCREASE is an indicator variable that equals one if restatement increases net income, and zero otherwise.

63. Myers, Scholtz & Sharp, *supra* note 15; Karen M. Hennes, Andrew J. Leone & Brian P. Miller, *The Importance of Distinguishing Errors from Irregularities in Restatement Research: The Case of Restatements and CEO/CFO Turnover,* 83 ACCT. REV. 1487 (2008).

64. FRAUD is an indicator variable that equals one if restatement identifies fraud, irregularities, and zero otherwise.

65. SEC is an indicator variable that equals one if restatement identifies SEC investigation, and zero otherwise.

66. NUMBER is the number of distinctive restatement reasons identified as accounting rule application failures, frauds, or errors.

67. CORE is an indicator variable that equals one if restatement is related to core accounts (revenue, expense, cost of goods sold), and zero otherwise.

68. PERIOD is a continuous variable representing the log of days of period affected by the restatement.

69. SEVERITY is an index variable having value from zero to five, which is the sum of two indicator variables that equal one if NUMBER or PERIOD are above 75% of each variable, respectively, and the existing three indicator variables—FRAUD, SEC, and CORE.

positive effect on the non-reliance judgment.[70]

Finally, following disclosure and materiality literature,[71] we included additional control variables[72] that might affect firms' non-reliance judgments and disclosure behaviors: financial distress, growth opportunity, firm size, and other disclosure related variables.[73] We provided no specific prediction for control variables. In addition, we included a REPEAT[74] variable to control for the effect of firms that restate their financial statements more than once. To control for the repetitive firm appearance, we clustered standard errors at the firm level for each regression. Moreover, we performed a sensitivity test after excluding the second and subsequent restatements filed by the same firm.

### C. *Model Specification for Determinants of Non-Reliance Judgment*

We estimated logit regression in which the dependent variable is an indicator variable that equals one if a firm makes a non-reliance judgment and files the identified event(s) in Item 4.02 on Form 8-K, and zero if the firm discloses restatement in other SEC filing forms. As independent variables for the identification of non-reliance judgment determinants, we included quantitative, qualitative, restatements characteristics,

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70. 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. We therefore include all six control variables in this analysis. The VIF values for SEVERITY and CORE are 3.59 and 2.11, respectively.

71. Laura Field, Michelle Lowry & Susan Shu, *Does Disclosure Deter or Trigger Litigation?*, 39 J. ACCT. & ECON. 487 (2005); Andrew A. Acito, Jeffrey J. Burks & W. Bruce Johnson, *Materiality Decisions and the Correction of Accounting Errors*, 84 ACCT. REV. 659 (2009); Marsha B. Keune & Karla M. Johnstone, *Materiality Judgments and the Resolution of Detected Misstatements: The Role of Managers, Auditors, and Audit Committees*, 87 ACCT. REV. 1641 (2012).

72. All control variables are included but not reported in the interest of simplicity. The complete table can be provided upon request.

73. These variables include whether firms use Big Four auditing firms, whether accounting quality is high, whether the industry accounting practices about 8-K disclosure choice are different, whether an auditor is changed after the misstated period, whether firms belong to high litigation risk industries, whether firms issue debts or stocks before or after the restatements, whether firms are under the debt and stock market monitoring system.

74. REPEAT is an indicator variable that equals one if a firm files restatement more than once during the sample period, and zero otherwise.

and other control variables categorized as we discussed in the previous section. Year dummy variables were included in all regressions to control for the decreasing relative frequency of 4.02–8K restatements, the decreasing frequency trend of restatements disclosure, and time-varying confounding effect such as changing legal and accounting practices. The simplified representation for the research question is as follows:

$$P(4.02\text{-}8K) = f(\beta_0 + \beta_1 Quantitative + \beta_{2\text{-}4} Qualitative + \beta_{5\text{-}10} Restatement\ Characteristics + Other\ Control\ variables + Year\ Fixed\ Effects + \varepsilon)$$

### D. *Model Specification for Hypothesis Test*

To test whether a specific disclosure channel is associated with higher litigation risk, we first needed to control for the manager's opportunistic channel choice behaviors. Managers who are aware of the risk involved in the disclosure channel choice might choose less prominent disclosure channel such as non-4.02–8K without regard to the seriousness of errors. This self-selection may introduce sample bias in our empirical test in that if some managers used non-4.02–8K disclosures, even though the errors were serious enough for the 4.02–8K disclosure, the effect of 4.02–8K disclosure on litigation risk would be underestimated.[75] By adopting the Heckman two-stage selection model,[76] we controlled for the bias that firms eager to lower future litigation risk might self-select the less prominent disclosure channel instead of complying with the Final Rule, even though there is a finding satisfying non-reliance judgment criteria.

The first stage involved estimating the probability of choosing 4.02–8K disclosure channel using the equation and variables identified in the previous section. Next, the inverse

75. See C.N.V. Krishnan & Ronald W. Masulis, *Law Firm Expertise and Merger and Acquisition Outcomes* 56 J.L. & ECON. 189 (2013) for another example of the self-selection issue. Krishnan and Masulis use the two-stage model to control for the self-selection bias in which "top tier law firms are associated with certain deal outcomes simply because they are hired more frequently in types of offers." *Id.* at 192. In their study, the outcomes of top tier law firms would have been overestimated without adjusting self-selection issue.

76. *See* James J. Heckman, *Sample Selection Bias as a Specification Error*, 47 ECONOMETRICA 153 (1979).

Mills ratio (INVERSEMILLS) was calculated based on the logit regression results in equation (1). By incorporating this ratio in the second-stage equation, we controlled for the possibility of firms choosing less prominent disclosure channels to lower the litigation risk. In equation (2), we dropped the qualitative consideration variables and included other variables in equation (1) to abide by the Heckman exclusion condition that requires one or more variables in the first-stage regression to be excluded in the second-stage regression.

The dependent variable (LITIGATION) is an indicator variable having a value of one if the disclosed restatement is identified as related litigation by Audit Analytics, and zero otherwise. We measure the three-day stock return around the restatement filing date (3DAY_RETURN)[77] to capture the price impact of the restatement announcements. In addition, historical share turnover, pre-restatement period return, post-restatement period stock response, financial industry dummy are included, but not reported, to control for other factors influencing the litigation risk.

The main variable of interest is 4.02–8K. We expect to have positive value for $\beta_1$, meaning that 4.02–8K channel choice is associated with higher future litigation risk after controlling for other risk factors. The logit regression to test our hypothesis can be presented as follows:

$$P(LITIGATION) = f\,(\beta_0 + \beta_1 4.02\text{-}8K + \beta_2 REPEAT + \beta_3 3DAY_RETURN + \beta_4 INVERSEMILLS + Other\ Control\ variables + Year\ Fixed\ Effect + \varepsilon)$$

## III.
## Analysis of Results

### A. *Test of Determinants of Non-Reliance Judgment*

We tested seven different quantitative measures for non-reliance judgments. Since the three-year average income is statistically the most optimal denominator to normalize the size of misstated error,[78] we use this measure to divide the size of error for the quantitative consideration category.

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77. 3DAY_RETURN is a continuous variable representing compounded raw returns over the three-day return around the restatement filing date.

78. Results are available upon request.

Model 1 in Table 3 documents regression results using all restatements' sample data. LOSS and INCREASE have significant and positive effect on the 4.02–8K disclosure channel choice, and FRAUD, SEC and SEVERITY variables have significantly positive coefficients as predicted.[79]

**TABLE 3: Determinants of Non-Reliance Judgment**

| Dependent variable | | | 4.02–8K | | | |
|---|---|---|---|---|---|---|
| | | Predicted sign | Model 1 | | Model 2 | |
| | | | Coeff. | p-value | Coeff. | p-value |
| Quantitative | | + | 2.041*** | 0.00 | 3.624*** | 0.00 |
| Qualitative | TREND | ? | -0.186* | 0.05 | -0.109 | 0.53 |
| | LOSS | ? | 0.460*** | 0.00 | 0.715*** | 0.00 |
| | INCREASE | ? | 0.417*** | 0.00 | 0.206 | 0.34 |
| Restatements Characteristics | FRAUD | + | 1.313** | 0.02 | 2.443** | 0.03 |
| | SEC | + | 0.980*** | 0.00 | 2.110*** | 0.00 |
| | NUMBER | + | 0.012 | 0.39 | 0.096 | 0.12 |
| | CORE | + | 0.258** | 0.04 | 0.781*** | 0.00 |
| | PERIOD | + | 0.087* | 0.08 | 0.226** | 0.02 |
| | SEVERITY | + | 0.349*** | 0.00 | -0.154 | 0.24 |
| Constant | | - | -2.082*** | 0.00 | -3.236*** | 0.00 |
| Other Control variables | | | Included | | Included | |
| Year Fixed Effect | | | Included | | Included | |
| Sample size | | | 3,389 | | 1,127 | |
| Pseudo R2 | | | 0.125 | | 0.279 | |

NOTE: *, **, and *** indicate statistical significance for each regression coefficient 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. Model 1 includes all restatements. Model 2 includes restatements filed by unique firms after 2007.

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.[80] Thereafter, the number of restatement disclosures has re-

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79. Hereafter, other control variables are included but not reported individually. Results are available upon request.

80. AUDIT ANALYTICS, 2014 FINANCIAL RESTATEMENTS; A FOURTEEN YEAR COMPARISON (2015), https://www.complianceweek.com/sites/default/files/AuditAnalytics_RestatementRpt_4-15.pdf.

mained stable.[81] To address the concern that transitory period of the Sarbanes–Oxley Act might drive the main results, we removed the restatements data disclosed between August 2004 and December 2006, and ran the regression as a sensitivity test. The untabulated results were similar to that of the full sample, implying that the temporary surge of restatements after the new regulation did not drive the main findings.

The last sensitivity test was conducted to mitigate the concern that a significant portion of restatements are repeatedly disclosed by the same firms, and these firms' specific characteristics might drive the main findings of this paper. In fact, 56% of the restatements were filed by firms that restated their past financial statements more than once. In Model 2 of Table 3, we excluded the second and subsequent restatements filed by the same firms and restatements disclosed before 2007, and documented similar results to those in the previous sensitivity test and the main findings.

### B. *Test of Hypothesis*

Table 4 reports the effect of 4.02–8K disclosure on the likelihood of future securities class action lawsuits after controlling for the price impact of restatements, self-selection bias, and other factors affecting litigation risk. We used equation (1) for the first-stage regression of Heckman's two-stage model. The inverse Mills ratio was calculated based on this first-stage regression prediction and added to the second-stage regression as one of control variables. Table 4 presents the second-stage regression.

81. *Id.* The annual average restatements filings are 898 in the last seven years and 843 in the last three years in our sample period.

**TABLE 4: 4.02–8K Restatements and Litigation Risk**

**Panel A: Model 1**

| Dependent variable | | LITIGATION | | | |
|---|---|---|---|---|---|
| | Predicted sign | Model1_ALL | | Model1_ND | |
| | | Coeff. | p-value | Coeff. | p-value |
| 4.02–8K | + | 0.213* | 0.07 | 0.099 | 0.27 |
| REPEAT | ? | 0.289** | 0.03 | 0.453*** | 0.00 |
| 3DAY_RETURN | - | -4.778*** | 0.00 | -4.898*** | 0.00 |
| INVERSEMILLS | ? | -1.828 | 0.12 | -2.607** | 0.05 |
| Constant | - | -3.990*** | 0.00 | -3.700*** | 0.01 |
| Control variables | | Included | | Included | |
| Year Fixed Effect | | Included | | Included | |
| Sample size | | 2,866 | | 2,728 | |
| Pseudo R2 | | 0.133 | | 0.130 | |

**Panel B: Model 2**

| Dependent variable | | LITIGATION | | | |
|---|---|---|---|---|---|
| | Predicted sign | Model2_ALL | | Model2_ND | |
| | | Coeff. | p-value | Coeff. | p-value |
| 4.02–8K | + | 0.482** | 0.02 | 0.539** | 0.03 |
| 3DAY_RETURN | - | -4.614*** | 0.00 | -4.257*** | 0.00 |
| INVERSEMILLS | ? | -1.670 | 0.20 | -2.768* | 0.07 |
| Constant | - | -2.620* | 0.06 | -1.488 | 0.23 |
| Control variables | | Included | | Included | |
| Year Fixed Effect | | Included | | Included | |
| Sample size | | 1,052 | | 1,002 | |
| Pseudo R2 | | 0.165 | | 0.150 | |

NOTE: *, **, and *** indicate statistical significance for each regression coefficient at the 10%, 5%, and 1% 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. Model with ALL (ND) suffix includes (excludes) dismissed cases. Model 1 includes all restatements. Model 2 includes restatements filed by unique firms after 2007.

Model1_ALL in Panel A of Table 4 shows that the stock market return (3DAY_RETURN) is negatively associated with litigation risk and statistically significant at the 1% level, imply-

ing that the negative price impact is associated with higher litigation risk. More importantly, after controlling for price impact and other variables affecting litigation risk, we find a positive and significant association between the 4.02–8K restatements disclosure channel and securities class action litigation risk. This finding implies that the 4.02–8K disclosure channel choice is associated with about a 24% (= exp(0.213)-1) increase in the odds of a future class action lawsuit, holding all other factors constant.

This result holds in most sensitivity tests using limited samples. In Model1_ND, we deleted dismissed cases and used the not-dismissed litigation sample. Model1_ND in Panel A had a positive, but not significant value for 4.02–8K. However, REPEAT variable had a significant effect in both regressions in Panel A, implying that unobservable characteristics of firms that repeat restatements several times might drive this insignificant result in Model1_ND. To test this possibility, we used the unique firm sample in Panel B of Table 4 after deleting the second and subsequent restatements filed by the same firm. At the same time, we deleted the restatements announced between August 2004 and December 2006 for sensitivity test in Panel B.

The coefficients of 4.02–8K in both Model2_ALL and Model2_ND in Panel B of Table 4 are significantly positive, confirming that the disclosure channel choice has a significant effect on future litigation risk even in the restricted sample and that restatement repeating firms are responsible for the insignificant result in Model1_ND.

In sum, 4.02–8K disclosure channel choice itself is associated with higher securities class action suits risk, supporting the possibility that firms may choose to shun the requirement of the Final Rule to lower the litigation cost.

## Conclusion

The non-reliance judgment is related to the materiality judgment. However, the immediate and prominent disclosure requirement of Item 4.02 on Form 8-K makes the non-reliance judgment quite different from the general materiality judgment. Using a comprehensive restatements database, this study examined the implied criteria firms use to make non-reliance judgments about the errors in their past financial statements. Based upon these criteria, we estimated the likeli-

hood of the 4.02–8K restatement disclosure choice to control for endogeneity, a tendency of firms to select the less prominent disclosure channel to avoid future litigation risk. This estimation allows us to use the Heckman two-stage model and to find that a pronounced restatement disclosure channel such as 4.02–8K is more likely to be associated with higher future litigation risk, which sheds some light on the current popularity of non-4.02–8K restatements.

This paper provides important implications for practitioners and regulators. The 4.02–8K disclosure is required when the misstatement is sufficient to warrant a non-reliance judgment. If the defendant deliberately misled investors by using a stealth restatement to correct prior material errors, plaintiffs could allege that the defendant intentionally violated the Final Rule to hide material information, thus meeting the scienter requirement.[82] If the stock market response to a 4.02–8K disclosure is negligible, this small or no price impact can be evidence that the presumption of reliance cannot be applied. Therefore, defendants can move for dismissal of the securities class suits at the certification stage without incurring significant legal cost.

The SEC might better serve the one of the main goals of securities law—disclosure of material information to investors—by providing management with more guidance as to the types of errors that warrant a non-reliance judgment and the attendant 4.02–8K disclosure. This approach could be effective to curb firms' opportunistic disclosure channel choice to minimize litigation risk by making the information more difficult to discern when part of a complex periodic disclosure, thereby frustrating the intent of the 2004 amendment to the Form 8-K filing requirement.

Currently, firms attempt to minimize the litigation risk by making information more difficult to discern as part of a complex periodic disclosure, which frustrates the intent of the 2004 amendment to the Form 8-K filing requirement. By providing more guidance as to the types of errors that warrant a non-reliance judgment and the attendant 4.02–8K disclosure, the SEC could efficiently curb firms' opportunistic choices of disclosure channel, and therefore better regulate the disclo-

82. *See, e.g.*, Matrixx Initiatives, Inc. v. Siracusano, 563 U.S. 27 (2011).

sure of material information to investors—one of the main goals of securities law.