Are Legal Contingency Disclosures Useful? Evidence from Textual Analysis

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Abstract: Are legal contingent liability disclosures informative? This broad question has been intensely deliberated by standard setters, regulators, and practitioners because the very information that has predictive informativeness to stakeholders can increase legal risk by amplifying the probability of loss. Despite the importance of this issue, research in this area has been limited due to a lack of large-scale data. We overcome this barrier using textual analysis to build a large-scale database of contingent liability disclosures for nearly 10,000 annual filings and 1,000 corporate lawsuits. We find evidence that firms provide some ex-ante disclosure about ongoing lawsuits, but that loss contingencies amounts disclosed after the lawsuit is resolved are more than double the amounts reported while the lawsuit is ongoing. Similarly, firms that ultimately settle are more than six times more likely to provide contingency disclosure after the lawsuit's resolution compared to beforehand. These findings suggest that legal conservatism significantly tempers both the timeliness and informativeness of legal contingency disclosures. Finally, we find some evidence that estimated loss disclosures are predictive of settlement outcomes, but we fail to find any evidence that such disclosures are predictive of resolution day returns, consistent with low information content. We conclude that legal incentives tend to outweigh reporting requirements, which largely leads to less informative legal contingency disclosures.

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1.0 Introduction

Our primary objective in this study is to evaluate the informativeness of contingent legal liability disclosures to stakeholders. Standard setters, regulators and financial statement users alike have expressed concerns that these disclosures are insufficient at resolving information asymmetries related to contingent losses. For example, the FASB, in a 2008 exposure draft in its Contingent Liabilities project asserted that:

> *"Investors and other users of financial information have expressed concerns that disclosures about loss contingencies…do not provide adequate information to assist users of financial statements in assessing the likelihood, timing, and amount of future cash flows associated with loss contingencies."* [1]

In addition, the SEC issued numerous "Dear CFO" letters asking companies to improve their contingency disclosures.[2] In 2016, the SEC filed the first ever lawsuit against a firm for failure to disclose loss contingencies[3] and such disclosures continue to be a common subject of SEC comment letters (Deloitte 2019). The IASB, too, has recently discussed the potential for contingent liability disclosure to be inadequate for financial statement users. Finally, an investor action group recently listed contingency disclosures as some of the "most troublesome disclosures" (p. 9; CFA Institute 2013). Thus, the informativeness of contingent liability disclosures remains a pressing question many stakeholders.

Given the regulatory attention to this issue, what inhibits companies from providing more or better contingency disclosure? The answer likely relates to the possibility that the disclosure itself can alter the incidence probability of future losses (e.g., Donelson, Hopkins and Yust 2018). That is, the future loss is endogenous to the ex-ante disclosure of that loss. Thus, managers face a disclosure dilemma in trying to provide sufficient information for shareholders, without disclosing sensitive information that can influence the likelihood of future loss. In fact, providing adequate contingency disclosure prior to lawsuit resolution may be suboptimal to shareholders, if by so doing they increase the expected *realization* of future losses. These competing incentives may manifest in what SEC Chief Accountant, Wayne Carnall, has referred to as a

[1] Although the project was ultimately dropped from the Board's agenda in 2012 after the both the initial and revised exposure drafts were met with severe opposition, the issue remained of concern to regulators and was the subject of increased scrutiny in SEC comment letters. Please see: https://www.reedsmith.com/en/perspectives/2012/07/fasb-abandons-project-to-modify-contingency-disclo

[2] https://www.sec.gov/divisions/corpfin/guidance/cfoforeclosure1010.htm

[3] https://www.sec.gov/litigation/complaints/2016/comp23639.pdf

reporting environment for contingent liabilities where firms are providing "pages of disclosure" but "saying little."[4] We examine this disclosure dilemma in order to understand which incentives – to provide sufficient information to shareholders and regulators or to withhold information to appease legal counsel – appear to win out.

We focus our study on litigation-related contingent liability disclosures, as opposed to other contingency and commitment disclosures for two reasons.[5] First, based on the extensive legal debate, regulatory deliberation, and firm opposition related to litigation disclosures, litigation-related contingent liability disclosures is the setting where the disclosure dilemma is at arguably its peak. On the one hand, current SEC guidance and FASB standards direct firms to provide information about the nature of outstanding litigation and, to the extent possible, quantify the potential range of expected outcomes in advance of litigation resolution. On the other hand, however, companies and lawyers have argued that overly descriptive or quantitative disclosures may be prejudicial to the outcome of litigation.[6] In fact, litigation-related contingencies were the primary motivation for recent proposed changes to accounting standards, as well as for stakeholders' severe opposition to those proposals, which lead to their ultimate abandonment.[7]

Second, despite the debate over the content and informativeness of litigation-related contingency disclosure, the scope and conclusions of extant research have been limited by the lack of easily accessible data – contingent liability disclosures are not available in public databases.[8] This is likely because the disclosures relating to contingent liabilities are often qualitative in nature, which makes them challenging to acquire on a large scale. We overcome this limitation using a textual analysis algorithm to identify and parse contingent

[4] Oral remarks made during an industry conference sponsored by the NYSSCPA in September 2010 as quoted in https://www.cfo.com/accounting-tax/2010/09/whats-on-the-secs-radar/

[5] Prior research has examined contingency disclosures related to environmental liabilities (Barth, McNichols and Wilson 1997; Clarkson, Li, Richardson and Vasvari, 2008; Kennedy, Mitchell, and Sefcik, 1998), employment issues (Hennes 2014), corporate tax issues (Gleason and Mills 2002), and warranties (Cohen, Darrough, Huang and Zach 2011).

[6] For example, the American Bar Association wrote that any estimate of potential exposure can "tip the reporting entity's hand…and distort the course of possible settlement" of the lawsuit. https://tinyurl.com/y57qzw49

[7] See, for example, https://www.accountingtoday.com/opinion/fasb-cancels-loss-contingencies-disclosure-project

[8] For instance, even though Compustat contains a field for total contingent liabilities, values are missing more than 95% of the time, which makes it nearly unusable as a test variable. We contacted WRDS about missing values of contingent liabilities (Compustat Code: CLT) and they responded with a link to variables that are always missing (shown next), along with the statement that "often these variables are created as placeholders for future data collection." Please see: https://wrds-www.wharton.upenn.edu/pages/support/manuals-and-overviews/compustat/north-america-global-bank/list-entirely-null-variables-compustat-datasets/

liability disclosures from a company's annual report (10-K). We develop measures of both *quantitative* and *qualitative* information provided by companies in their litigation-related contingency disclosures contained in the 10-K. These categories align with the recommended accounting treatment for loss contingencies, which require narrative disclosure (qualitative) whenever the probability of loss is deemed "reasonably possible" and further require numerical disclosure of an estimated loss liability (quantitative) when "reasonably estimable."

We pair our contingent liability database with a large database of corporate lawsuits from several sources, including Audit Analytics, the Stanford Class Action Clearinghouse (SCAC) and Bloomberg Law. Our data cover a wide variety of lawsuits related to product recalls, securities issues, labor issues, intellectual property, etc., which provides significant cross-sectional variation in firm attributes, the magnitude of potential loss, and the public visibility of these suits. Moreover, we hand-collect and vet legal dates related to lawsuit filing, motion to dismiss, and dismissal or settlement, which aids in empirical identification of changes in legal contingency disclosure as the corporate lawsuit evolves and resolves relative to periods of non-litigation.

We use these novel data and research design to examine whether legal contingency disclosures are informative. We use the word informative here in the same sense as the FASB quote above, namely that the disclosures help in "...assessing the likelihood, timing, and amount of future cash flows associated with loss contingencies." We examine contingency disclosure informativeness in three ways. In our first test, we examine the timeliness of legal contingency disclosures motivated by FASB statements, SEC comment letters, and recent SEC lawsuits, all of which convey support for the notion that firms provide adequate information *prior* to the resolution of the lawsuit.[9] By comparing contingency disclosure during and after the lawsuit period, we can assess the timeliness and adequacy of ex-ante contingency disclosure.

Overall, the results from this first test are consistent with the intuition that legal conservatism tempers the timeliness and informativeness of legal contingency disclosures. Although nearly all measures of legal contingencies increase significantly during the lawsuit period relative to prior years, sued companies tend

[9] See, for instance: https://www.sidley.com/en/insights/newsupdates/2019/10/sec-charges-highlight-need-for-timely-disclosure-of-loss-contingencies-and-material-business-risks

to provide substantially more numeric disclosure *after* the lawsuit is resolved. To the extent that the amount of disclosure observed subsequent to resolution provides a benchmark for information that might have been probable and estimable prior to resolution, these results suggest that disclosed loss estimates are systematically understated relative to their ultimate realization. In other words, firms respond to legal incentives by underreporting legal contingencies during the lawsuit, but increasing reporting transparency once the lawsuit is finalized.[10]

In our second set of tests, we examine whether the amount and content of disclosure is different depending on the ex-ante expected severity of the lawsuit. As the likelihood of potential loss moves from remote to reasonably possible, we expect disclosure to increase, consistent with the accounting requirements for additional qualitative and quantitative disclosure based on probability of legal loss. Overall, the results fail to support this intuition. To capture the expected severity of the lawsuit, we first examine the eventual outcome of the lawsuit (settled vs. dismissed), under the intuition that management has private information as to the likely future outcome of the lawsuit. We find that, when the lawsuit is expected to settle, firms are significantly more likely to provide an estimated loss contingency only *after* settlement. The difference between during- vs. post-lawsuit magnitudes is quite large: firms are six times more likely to provide an loss contingency after settlement relative to the sued period. In terms of qualitative disclosure, sued firms are significantly more likely to discuss insurance after the settlement, less likely to make assertions about immateriality and inestimability about the estimated loss, and more likely to include defensive language in the footnote disclosures.

We also proxy for the severity of the lawsuit based on whether the court denied the firm's petition for lawsuit dismissal. This test is particularly adept at capturing a shock to outcome uncertainty regarding the estimated legal contingency. Once the court denies dismissal of the lawsuit, effectively upholding the merits of the lawsuit, the likelihood that the firm will settle the claim increases dramatically such that the losses should meet the disclosure threshold of "reasonably possible." We find that contingency disclosure remains

[10] Note that these results cannot simply be the result of uncertainty prior to lawsuit resolution. Uncertainty should diminish the precision of loss estimates but should not downwardly bias disclosures – that is, unbiased uncertainty should lead to as many instances of overestimated losses as underestimated losses.

constant when the court denies dismissal of the lawsuit (but before the resolution of the lawsuit). Yet again, however, contingency disclosure increases far more *after* the lawsuit is fully resolved. Together, these two tests provide evidence to suggest that companies yield to legal incentives and under-report contingent liabilities before the lawsuit is resolved, even when the loss is expected to be severe.

As our final assessment of the informativeness of contingency disclosure, we examine the predictive ability of contingent liability disclosure for several measures of the ex-post legal loss faced by shareholders, including the lawsuit outcome, the actual settlement amount of the lawsuit, and the market reaction to important lawsuit event dates. Here, the results partially support the intuition of predictive informativeness. Specifically, a company's quantitative estimated contingencies in the latest 10-K prior to the legal resolution are associated with the lawsuit outcome and settlement amount. Moreover, the likelihood of settlement is increasing in a firm's mentioning its insurance coverage, consistent with either moral hazard or with management's intention to convey that insurance minimizes the cash flow loss. Of the narrative disclosure measures, firms that use language to convey the immaterial language of the lawsuit are less likely to settle and settle for lower amounts. On the other hand, those that use defensive language in the litigation-related disclosures are more likely to settle and for larger amounts. Moreover, none of the measures are related to the market reaction to the lawsuit's resolution, suggesting that legal contingency disclosure does not contain value relevance beyond other publicly available signals. In summary, the results suggest that estimated contingent liability amounts are somewhat predictive of legal outcomes, but not so for changes in market value related to the lawsuit outcome.

This study represents the first large-scale analysis of contingent litigation disclosure. Using state-of-the-art textual analysis, we overcome prior data limitations to provide evidence on the extent and timing of contingent liability disclosure, as well as its predictive ability.[11] With these data, we endeavor to provide direct evidence to accounting standard setters. In part, our paper is inherently policy-driven – we directly test the

[11] Prior research has been limited to small samples because of the labor-intensive nature of data collection (e.g., Desir et al (2010); Hennes (2014). Other studies in the literature employ experimental settings (e.g., Kennedy et al 1998; Nelson and Kinney 1997).

FASB's contention that contingency disclosure should sufficiently inform investors as to the potential cash flow implications of pending corporate events, in our case shareholder lawsuits. As we discuss in more detail in Section 2, the accounting standards for contingent litigation disclosure have been highly contentious.

In addition, our paper speaks to theories of disclosure in the context of significant frictions, such as proprietary costs (e.g., Verrecchia 2001). Our setting is unique to prior research, however, in that the friction is caused by the legal system, which is a prominent but much less frequently studied impediment to accounting disclosure. At the heart of the contention is a strategic disclosure dilemma: if firms disclose contingent liabilities, they tip their hands to potential corporate lawyers waiting in the wings and potentially validate the underpinnings of the suit; if they fail to disclose, they run up against their auditors and face potential regulatory scrutiny by the SEC. This setting is uniquely suitable to provide evidence on the extent to which legal incentives encumber disclosure decisions. Moreover, our study falls in line with the disclosure-litigation literature, although our study is one of the few to examine disclosure after the litigation—prior studies primarily focus on disclosure pre-empt litigation ex ante.

Our findings suggest that sued companies attempt to balance disclosure tradeoffs, providing some disclosure during the lawsuit period but holding back substantial information until after the lawsuit is resolved. In other words, firms respond to legal incentives by underreporting legal contingencies during the lawsuit, precisely when stakeholders need such information for cash flow decisions. Similarly, while our results suggest a correlation between firm disclosure and resolution outcomes, we also find that such disclosures are not useful to predicting market responses. Overall, our results suggests that incentives for legal conservatism impede the conveyance of adequate and timely legal contingency disclosures in advance of legal resolution.

2.0 Background and Prior Literature

2.1. Background and Literature

The disclosure and informativeness of legal contingency disclosures remains a pressing question for both regulators and standard setters. On the one hand, regulatory attention has increased markedly over the

last decade. The FASB, IASB and SEC have all considered major changes to disclosure requirements related to contingencies. On the other hand, opponents ranging from auditors, preparers, lawyers and politicians have opposed additional legal contingency disclosure for fear that it would "tip the reporting entity's hand…and it will almost certainly distort the course of possible settlement or resolution by putting a floor under the amount that will be required to resolve the matter" (American Bar Association 2008).[12] Over the past 15 years, the regulatory debate about this disclosure dilemma has been nothing short of fierce. For brevity, we have placed a detailed history of this debate in Appendix 2, in which we discuss the many deliberations and proposed disclosure regulations, as well as the opposition to those changes. Appendix 2 also provides a primer on the accounting for contingent liabilities. In short, the current reporting environment lends itself to a Goldilocks-type setting, in which companies must provide just the right amount of legal contingency disclosure to satisfy both the regulators and the attorneys.

The relationship between disclosure and litigation has been studied in prior research extensively.[13] At heart of most prior research is the issue of whether the timely revelation of bad news (often earnings news) serves as a catalyst or deterrent to securities litigation. Our research focus is distinct from this stream of prior literature in that we investigate *what happens next*, when securities litigation is already a foregone (or likely) conclusion as a result of a corporate action or event that has already occurred. That is, once a firm is already exposed to potential litigation, we examine whether and how early firms provide disclosures about the potential losses that may ensue from litigation, and whether such disclosures are adequately timely and informative to estimate resolution outcomes.

The answer to this question has significant implications for shareholder protection; prior research has estimated significant declines in firm value associated with corporate lawsuit filing, with extreme values that can range into the billions (Gande and Lewis 2009; Bhagat and Ramano 2002). Additionally, prior research

[12] https://www.fasb.org/cs/BlobServer?blobkey=id&blobnocache=true&blobwhere=1175818387660&blobheader=application%2Fpdf&blobheadername2=Content-Length&blobheadername1=Content-Disposition&blobheadervalue2=1853808&blobheadervalue1=filename%3D52265.pdf&blobcol=urldata&blobtable=MungoBlobs

[13] As a partial list, see for example: Skinner (1994, 1997), Francis et al. (1994a, 1994b), Johnson et al. (2000, 2001), Baginski et al. (2002), Frankel et al. (2002), Matsumoto (2002), Field et al. (2005), Lennox and Park (2006), Rogers and Van Buskirk (2009), Donelson et al. (2012), Donelson et al (2019).

has shown that the costs of litigation extend beyond the direct costs associated with defense and resolution. Ex post, litigation has been shown to have significant effects on a company's product market positions (Karpoff et al., 2008) and their access to, or cost of, capital (Autore et al 2014). Accordingly, information about impending or ongoing litigation is of material import to a firm's shareholders.

Notwithstanding, prior research on contingent litigation losses has been limited due to the unstructured nature disclosures and the lack of database coverage. Studies utilizing small, hand-coded disclosure samples have yielded mixed results, potentially reflecting idiosyncrasies across samples; and as a consequence, it is hard to generalize conclusions. For example, while several studies offer descriptive evidence that a large proportion of sampled firms fail to provide any advance disclosure of litigation losses (Dennis and Kieth, 1981; Fesler and Haggler 1989; Thomspon et al 1990; Little et al 1995), others studies find the opposite (Desir et al, 2010; Hennes 2014) or provide evidence of heterogeneity in disclosure timeliness (Cen et al 2018, Chen et al 2018). Similarly, these prior studies have disagreed as to the information value of both the quantitative and qualitative content of such disclosures.

2.2. Predictions

We develop three related predictions on the timeliness, content and informativeness of contingent liability disclosure. The first relates to the extent to which, on average, firms provide timely disclosures about the potential losses that may ensue from litigation. Accounting standards and SEC regulations dictate that in the presence of litigation, firm disclosure should increase proportionate to the merits of the case at hand. Specifically, unless the possibility of loss is deemed "remote," disclosure is required. Legal analysis on the resolution of core class action lawsuits suggests that on average, somewhere between 40 and 75% of corporate lawsuits are settled out of favor for the company (Cornerstone 2018[14]; Haslem 2005), suggesting that the average lawsuit engenders at least a "reasonably possible" probability of material loss to the firm, thereby requiring disclosure in advance of litigation settlement. Based on the standards, the question of *whether* companies will increase contingency disclosure when facing lawsuit is not particularly compelling – we expect that they will.

[14] https://www.cornerstone.com/Publications/Reports/Securities-Class-Action-Filings-2018-Year-in-Review

However, we can examine both the *timing* and the *magnitude* of any discernable increase in disclosure during the lawsuit periods in order to assess its informativeness. Critics have argued that litigation contingences are not timely (e.g., Desir et al 2010; Holder and Karim 2012). Following that critique, the SEC has warned companies that when litigation losses materialize, SEC staff may review *prior period disclosures* to determine whether adequate early-warning disclosures were made. The SEC has admonished that circumstances where a realized loss is not preceded disclosure of an estimated amount should be relatively rare and that the inestimability of a loss should not preclude the disclosure of other material facts. Recent SEC comment letters draw attention to cases where an ex post loss accrual is provided or a legal case is settled, but little to no loss contingencies were provided ex ante (Deloitte 2019). In other words, contingency disclosures *after* to the lawsuit's resolution provide insights into the informativeness of the contingency disclosures *prior* to the lawsuit's resolution.

Accordingly, our first prediction examines the timeliness of legal contingency disclosure by examining how ex ante disclosures track with ex post disclosures, which allows us to provide evidence on the adequacy of early-warning disclosures. Additionally, in our empirical specifications, we examine both the accrual of contingent liabilities, which are subject to considerable uncertainty, as well as the disclosure of other potentially informative quantitative facts such as claims amounts and insurance limits which are known with certainty up front. Thus, we allow for differences in the certainty of information to affect firm disclosure patterns. We also consider qualitative statements about the materiality and estimability of future losses. To the extent that ex ante legal contingency disclosures are similar in content and magnitude with those made after the lawsuit's resolution, we consider them to be timely and informative. Thus, our first prediction is as follows:

Prediction 1: Contingent liability disclosure during the lawsuit will be similar in content and magnitude to that provided after the lawsuit.

Our second prediction is based on the premise that contingency disclosures are more useful the more they relate to ex ante indicators of loss. That is, for lawsuits that are more likely to settle out of favor, loss contingencies should be higher. We develop predictions based on two ex-ante indicators where expected losses are higher. First, ex ante expected losses should be higher for lawsuits that are expected to settle

relative to those expected to be dismissed by the courts. The expected loss related to a specific litigation event depends on the unique merits of litigation claims, as well as the difficulty in proving such claims. Managers and legal counsel likely have superior knowledge about the probability of adverse outcome to evaluate such claims, and will likely have private information about a firm's incentives to settle versus let the case go to verdict. As such, cases that are eventually settled for damages should have greater ex ante contingency disclosure relative to those that are eventually dismissed by the courts.

Second, the standard evolution of a lawsuit involves the filing of a motion to dismiss the lawsuit as lacking legal merit. The outcome of this motion, which is publicly observable, has considerable implications for the ultimate case outcome, and thus management's assessment of the probability of loss.[15] If the motion is granted and the case is dismissed, the case is fully resolved. However, if the motion is denied, and the case goes forward, the likelihood that the company will lose the lawsuit is higher in expectation. Thus, considerable outcome uncertainty is resolved with the motion to dismiss ruling – litigation that survives the motion to dismiss will almost certainly settle against the sued company. As a result, it should meet the "reasonably possible" threshold for contingency disclosure. Accordingly, we expect to observe an increase in contingent liability disclosures subsequent to a denial of company's motion to dismiss the case.

Overall, we predict that managers, in connection with their legal counsel, will respond to both private and publicly available signals about the likelihood of litigation losses when determining the extent of contingent liability disclosure. Again, our primary interest is in disclosures that occur during the sued period, and we look to the resolution period to provide a benchmark of the disclosure level that plausibly could have been made ex-ante. Thus, our second prediction more formally stated is:

Prediction 2: Contingent liability disclosures made prior to litigation resolution will be increasing in ex-ante indicators of loss probability.

Our final prediction regards the predictive ability of the contingent liability disclosure as way to speak to their cash flow informativeness. In particular, we are interested in understanding whether contingent

[15] Motions to dismiss that are granted are rarely overturned on appeal, whereas the overwhelming majority of cases that survive the motion to dismiss are ultimately settled. See, https://www.instituteforlegalreform.com/uploads/sites/1/UnstableFoundation_Web_10242017.pdf

liability disclosures simply reflect information that is otherwise already impounded from other sources by users, or whether such disclosures convey informative, forward-looking information about the probable outcome of litigation. Regulators have made clear that the purpose of contingent liability disclosures is to help users assess the likelihood of *future* cash flows. However, as discussed in preceding paragraphs, given the sensitive and volatile nature of ongoing litigation, managers may be wary of providing information that could advantage plaintiffs by revealing management's assessment of case merits in advance of lawsuit resolution or opening the door to expanded discovery. Indeed, managers may have competing fiduciary responsibilities to shareholders *not* to disclose, if by so doing they increase the expected *realization* of future losses.

Thus, it is unclear, whether sued period contingent liability disclosures on average are expected to contain content informative to predicting future outcomes. Indeed, this question has been at the crux of regulatory attention over the last two decades. Our prediction is, accordingly, exploratory in its formulation:

Prediction 3: Contingent liability disclosure may or may not be predictive of actual losses and market outcomes related to the lawsuit.

While these predictions derive from important policy questions raised by standard setters, auditors, preparers and users, they have not been explicitly tested using large-scale data. In the next section, we provide details on our novel data, as well as our empirical analyses to test these predictions.

3.0 Data, Sample, and Variable Measurement

3.1 Measuring Contingent Liability Disclosure

Our primary empirical innovation is in our method to textually parse and identify contingent liability disclosure provided in mandatory disclosures on a large scale. To do so, we develop an algorithm to systematically identify these disclosures, separate them from other disclosures, and convert them into intuitive measures capturing the existence and characteristics of both quantitative and qualitative contingent liability disclosure. The algorithm is quite involved, so we leave the full explanation to Appendix 2 and provide a brief summary here.

The first major step, which we call Classification, is to identify the correct disclosures and isolate them from the myriad other disclosures in the 10-K. We do this by identifying the paragraphs that relate to legal contingencies. These paragraphs derive from two specific sections of the 10-K:

1) Item 3 – Legal Proceedings - a mandatory disclosure, required by Regulation S-K, which requires a description of material pending legal proceedings involving the company, its subsidiaries or officers (Ernst and Young 2018).
2) Commitments and Contingencies – the common phrase used for the footnote to the financial statements that describes the company's the footnote to the 10-K that is related to its extant legal and financial commitments.

Because the Commitments and Contingencies footnote number is frequently referenced within Item 3, our algorithm uses these references to search for relevant information to locate the Commitments and Contingencies footnote.[16] When such information is not available, we use a more complicated series of steps to identify the relevant information (see Appendix 3 for more information).

While the majority of text in Item 3 relates to legal contingencies, the Commitments and Contingencies footnote frequently covers a wide variety of contingent liabilities, including not only legal issues, but also such items as lease contracts, warranties, purchase obligations, royalties and sales leasebacks, among other things. In order to identify the separate out legal paragraphs within the Commitments and Contingencies footnote, we identify key words that identify litigious paragraphs (e.g., defendant, injunction, etc.) and key words that identify non-litigious paragraphs (e.g., warranty, lease, guarantee, etc.). Erring on the side of conservatism, we only use those paragraphs that contain words in our litigious list, but do not contain words in our non-litigious list. We are currently in the process of validating this process further.

The second major step, which we call Scraping, is to apply our Classification schema to the all 10-Ks pertaining to firms who face a corporate lawsuit. We begin by acquiring all the 10-K filings from EDGAR for all firms subject to corporate lawsuits during the sample period 2005-2018.[17] We focus on 10-Ks (rather than

[16] For example, FedEx's Item 3 in full is: "FedEx and its subsidiaries are subject to legal proceedings and claims that arise in the ordinary course of their business. For a description of certain pending legal proceedings, see Note 18 of the accompanying consolidated financial statements." In these cases, we train the text-gathering algorithm to acquire all legal-related paragraphs in the footnotes that were referenced in Item 3. Our algorithm will capture this single sentence from Item 3, then move to Note 18 and pull all legal paragraphs from that footnote.

[17] We thank Tim Loughran and Bill McDonald for sharing the universe of 10-Ks. We accessed them at the following link in July 2019: https://sraf.nd.edu/data/stage-one-10-x-parse-data/

10-Qs) because they contain more complete information and are audited/reviewed annually. Within each 10-K filing, we scrape out the relevant information using our Classification schema to identify the text specifically related to legal proceedings from Item 3 and other footnotes. Our Scraping approach results in several measures of quantitative and qualitative contingency-related disclosures, which are detailed in Section 3.3 below.

3.2 Lawsuit Data

We build a sample of corporate lawsuits filed against public firms between 2003 and 2018, using data from two primary sources: Stanford University's Securities Class Action Clearinghouse (SCAC) and Audit Analytics. SCAC provides coverage of securities class-action lawsuits and has been used extensively in prior research (e.g., Kaplan and Williams 2012; Rogers et al., 2011; Cazier et al., 2019; among *many* others) for its comprehensiveness and scope.[18] SCAC provides access to all of the relevant legal filings related to the lawsuit including the initial lawsuit filings, motions to dismiss, appeals and settlement agreements. We employ text-scraping in SCAC to extract lawsuit filing date, case status (settled vs. dismissed), and stock tickers. From legal filings, we hand collect resolution dates (date of dismissal or date of initial settlement agreement), dates of denial of dismissal, and settlement amounts as these variables are more difficult to consistently identify through text-scraping. We expand our sample to include non-securities type lawsuits using Audit Analytics' Legal Case and Legal Parties database. Audit Analytics provides data on (i) the date lawsuit was filed, (ii) the date the lawsuit was completed, (iii) the CIK of the associated firm, (iv) the outcome of a lawsuit, and (v) the settlement amount which can be downloaded in database format. As with SCAC data, we hand collect and manually review legal filings in Bloomberg Law to determine the effective date of lawsuit resolution.[19]

[18] SCAC engages in validation of covered lawsuits including the combining of multiple classes that are involved in a lawsuit into a single lawsuit observation. http://securities.stanford.edu/ .

[19] Because lawsuits frequently have extended appeals and other proceedings, the outcome of a lawsuit is frequently known well before its conclusion. The settlement date in both SCAC and Audit Analytics therefore often reflects a date years after the settlement terms of a lawsuit are effectively known and agreed upon. Accordingly, we hand collect filings to manually determine the date that a lawsuit was most likely to have settled. Results are similar if we instead use the resolution dates provided by these databases.

We apply several criteria to observations drawn from Audit Analytics and SCAC data. In Audit Analytics, we only keep lawsuits in which the company was the defendant and drop lawsuits that are consolidated or remanded. Furthermore, because Audit Analytics provides more rich classifications of lawsuits, we classify only those lawsuits that were settled or received a judgement in favor of the plaintiffs as settled lawsuits. For SCAC lawsuits, we keep only those lawsuits that are settled or dismissed; those that are remanded or ongoing are dropped from the sample.

Table 1 presents the sample selection procedures. First, we merge the lawsuit databases with the disclosure measures based on when the 10-K falls within the progression of the lawsuit. The result is an unbalanced firm-year-lawsuit panel (i.e. one firm-year may have multiple observations if it has multiple lawsuits).[20] We merge in financial statement data from Compustat at the firm-year level, as well as stock return data from CRSP. We discard from our sample firms that cannot be matched to Compustat/CRSP, as well as those with negative total assets. We also require sued firms to have adequate controls for our regressions. Finally, we remove any lawsuit that does not have a 10-K available at any point during which the firm is being sued. These exclusion results in 9,845 lawsuit-firm-years from 925 lawsuits.

3.3 Variable Measurement

Our primary variables of interest capture the incidence and content of contingent liability disclosure related to legal matters, as provided in the annual 10-K filing. Based on the text-identifying algorithm discussed in Section 3.1, we construct our primary measures of disclosure under two main categories: (i) quantitative legal contingency-related disclosure and (ii) qualitative legal contingency-related disclosure.

We develop three measures of quantitative legal contingency-related disclosure. First, we measure whether the company provides an estimated loss contingency in a given year in their legal contingency disclosures; if so, we set *Estimated Loss Indicator* equal to 1 and 0 otherwise. Second, we measure whether a company provides a specific amount of the plaintiff's monetary claim in the lawsuit; if so, we set *Claim*

[20] Results are similar if we only allow one observation per firm-year and count a firm as in a sued-period if it has any active lawsuit in our sample, and in a resolution period if it has any recently resolved lawsuit in the sample.

Indicator equal to 1 and 0 otherwise. Third, we measure whether the company provides a monetary amount related to their indemnity insurance; if so, we set *Insurance Indicator* equal to 1 and 0 otherwise.[21]

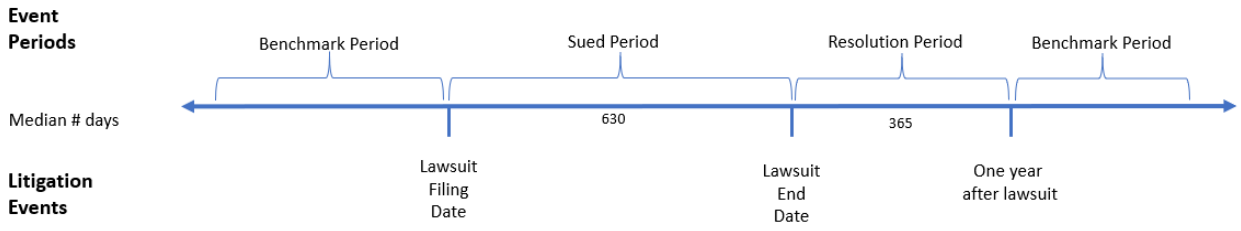
We develop four measures of qualitative legal contingency-related disclosure. First, *N. Words* is a proxy for the total amount of contingency disclosure available to stakeholders in that year's 10-K, and is computed as the ratio of the total words disclosed in the litigious paragraphs of a firm's 10-K to the total words in the entire 10-K.[22] For those observations in which an estimated loss is not provided (i.e., where *Estimated Loss Indicator* = 0), we search the text for discussion of whether the amounts are either immaterial or inestimable. Therefore, *Immaterial Indicator* is an indicator variable set equal to one in the presence of wording in the legal contingency paragraphs suggesting that the legal claims are immaterial and when *Estimated Loss Indicator* = 0. *Inestimable Indicator* is an indicator variable set equal to one in the presence of wording in the legal contingency paragraphs suggesting that the legal claims are inestimable and when *Estimated Loss Indicator* = 0. Finally, when the company does provide an estimated loss contingency, but also includes language suggesting that the lawsuit claims are either immaterial or inestimable; we label this kind of disclosure as defensive. Thus, *Defensive Indicator* is an indicator variable set equal to one when *Estimated Loss Indicator* = 1 and either *Immaterial Indicator* =1 or *Inestimable Indicator* =1.

Our empirical identification relies on time-series variation in how legal actions will affect a company's expected loss contingency and related disclosures. To capture this variation, we focus on various litigation periods where financial reporting requirements for contingent liability disclosure are heightened, relative to periods when disclosure should be relatively minimal. In particular, we focus on the *Sued Period*, which is an indicator equal to 1 during the time between the filing of the corporate lawsuit (Lawsuit Filing Date) and the effective conclusion of the lawsuit (Lawsuit End Date), and 0 otherwise. Filing dates are provided by the Audit Analytics and SCAC database and effective resolution dates are hand-collected from legal filings obtained via Bloomberg Law and SCAC as described above. During the *Sued Period*, companies are aware of and should be actively assessing the perceived risk of loss from litigation, leading to heightened disclosure

[21] Appendix 3 provides additional details for identifying words and phrases related to our legal contingency disclosure measures.
[22] Before counting the number of words, we stem and lemmatize all words and remove any stop words.

requirements. We also examine the *Resolution Period*, defined as an indicator equal to 1 during the one-year period subsequent to the conclusion of the corporate lawsuit (Lawsuit End Date), and 0 otherwise. We expect that the *Resolution Period* will also contain heightened disclosures informative of the ultimate realization and materiality of estimated losses.

The figure below (also included in Table 1) provides a timeline of these dates:



As shown, the *Sued Period* generally lasts over two years, with a median number of days of 630. The median *Resolution Period* is also exactly 365 days, by construction.

In our tests of *Prediction 1*, we compare the contingency disclosure variables during each of these important litigation event periods to assess whether and to what extent firm disclosures increase in response to litigation events. In particular, we compare disclosures during the sued period to those during the resolution period to provide evidence on the adequacy of early-warning disclosures relative to the ex-post realization of losses.

For our tests of *Prediction 2,* we compute two indicators to capture the heterogeneity in ex-ante litigation severity . Our first proxy is an indicator variable, *Settled*, which is equal to 1 when the lawsuit is settled and equal to 0 when the lawsuit is dismissed by the court.[23] Our second proxy for ex-ante legal severity relates to the motion to dismiss the lawsuit as lacking legal merit. When the court considers this motion, it either tosses out the case (dismissal) or not (denial of dismissal). Thus, considerable outcome uncertainty is resolved with the motion to dismiss ruling – litigation that survives the motion to dismiss will almost certainly settle against the sued company. We hand-collect the dismissal motion dates from the initial

[23] Stanford provides a description of the frequency of lawsuit settlement here: https://www-cdn.law.stanford.edu/wp-content/uploads/2015/06/When-are-Securities-Class-Action-Dismissed-When-Do-They-Settle-and-for-How-Much-An-Update.pdf

legal filings from SCAC, but are unable to ascertain these dates for the Audit Analytics sample – thus our tests on this variables are limited to the subsample of securities class-action litigation from SCAC.

For our tests of *Prediction 3,* we compute several measures that capture outcomes of the lawsuit. These outcome measures include the following: the outcome of the lawsuit (i.e., settled or dismissed), the dollar amount of actual settlement amount, and the market reaction on the date of the lawsuit's resolution. *Settled* is computed as previously described. We use settlement dates provided by Audit Analytics where available and, for class-action lawsuits provided by SCAC, we hand-collect the settlement amount based on court approved settlement agreements available from SCAC. *Settlement Amount* is the (logged) total amount of the settlement.[24] We measure the market reaction to the resolution of the lawsuit, *Resolution Date Return*, as the absolute value of the difference between the sued firm's cumulative raw return for the 3-day period centered on the lawsuit resolution date and the cumulative CRSP value-weighted abnormal return for the same window.[25]

We also include a host of control variables to account for accounting and economic factors that influence either disclosure, litigation, or both. First, we include a time-varying measure of ex-ante litigation risk, *Litigation Risk*, which is a modified version of the litigation score developed in Kim and Skinner (2012). Although all the firms in our sample are sued (i.e. the ex-post observed litigation risk is 100%), we include *litigation risk* because the ex-ante risk of litigation may be correlated with the ex-post risk of negative resolution. We also include the following financial variables: *BTM* (book-to-market ratio), *Leverage*, *ROA*, and *Market Cap*, which capture disclosure incentives related to growth, financing risks/constraints, profitability and size, respectively. In Tables 6-8, we also include the *Filing Date Return* as a control, which is computed is the absolute value of the difference between the cumulative raw return for the 11-day period starting 10 days before the filing date and ending one day after and the cumulative CRSP value-weighted return for the same window. The computation of all test and control variables is provided in Appendix 1.

[24] We assume that this is $0 if lawsuit was dismissed because dismissed suits always have a settlement amount of $0.
[25] We use absolute value abnormal return in order to test whether sued period disclosures reduce announcement surprise at the resolution date. Our results are consistent using a signed measure of abnormal returns.

3.4 Descriptive Statistics

We provide descriptive information about our various measures in Table 2, Panel A. About 27% of firm-years disclose an estimated loss contingency amount (i.e., the mean *Estimated Loss Indicator* is 0.27). About 30% of firm-years disclose a claim amount, while about 11% of firm-years disclose the existence of indemnification insurance. The median number of contingency-related words (*N. Words*) for all firm-years is 487 lemmatized words (or about 5 paragraphs), which amounts to about 1% of the total words in the 10-K. 56% of firm-years make statements regarding the immateriality of the legal claim, while 38% of the firm-years make specific mention that the future loss is inestimable. Over the sample period, the average firm is facing a lawsuit about 21% of the available firm-years (i.e., the mean *Sued Period* is 0.20), with the resolution period average about 6% of the firm-years.

The lawsuit outcomes also present some interesting descriptive statistics. About 46% of lawsuits in our sample are settled (implying 54% are dismissed), resulting in cash outflows for the defendant firm. The average settlement amount is about $30M (this average includes the many lawsuits that were dismissed for $0 settlement). The average signed filing date abnormal return is strongly negative, with a median drop in stock price of almost 5% over the 12-day window around the lawsuit filing date. The average absolute value resolution date abnormal return is 3%, indicating that pre-resolution disclosures do not perfectly anticipate the outcome of the lawsuit. However, average signed returns (untabulated) are roughly zero, suggesting that on average market expectations are unbiased prior to lawsuit resolution.

Panel B of Table 2 presents univariate correlations among variables of interest. Both quantitative and qualitative disclosure variables are largely positively correlated with each other. In supplemental tests (Table 9), we use principal component analysis of these variables, given their high collinearity. These disclosure variables are also significantly related to the company's size (*Market Cap*), and profitability (*ROA*), and *Litigation Risk*. We turn to our multivariate tests next.

4. Contingency disclosures in response to litigation events

4.1 Timeliness of contingency disclosure (Tests of Prediction 1)

In this section, we examine the timeliness of litigation contingency disclosure by comparing the extent of disclosure during the sued and resolution periods. We design the empirical model to capture changes in contingency-related disclosure for a given firm during different litigation event periods. In this design, the control condition is captured by the firm's disclosures before it is sued, and after the resolution disclosure period—i.e., the firm serves as its own control. We also include a variety of controls that account for other factors that can influence disclosure decisions (e.g., economic performance, size). The model includes two-way industry-year fixed effects to account for macroeconomic effects on a particular industry during a particular year, and standard errors clustered by firm.

All together, the empirical model is akin to that in Rogers and Van Buskirk (2009), as it captures the inter-temporal difference in legal contingency disclosure variables over different litigation event periods, as follows:

$$\begin{aligned} \textit{Contingency Disclosure}_{i,t} = {} & \alpha_{FE} + \beta_1 \textit{Sued Period}_{i,t} + \beta_2 \textit{Resolution Period}_{i,t} \\ & + \beta_K \textit{Controls} + \varepsilon_{i,t}. \end{aligned} \tag{1}$$

The vector of contingency-related disclosures used as dependent variables (*Contingency Disclosure*) in equation (1) are divided into two categories of disclosure: quantitative (*Estimated Loss Indicator*, *Claim Indicator*, and *Insurance Indicator*) and qualitative (*N. Words*, *Immaterial Indicator*, *Inestimaable Indicator*, and *Defensive Indicator*). The primary variables of interest are *Sued Period* and *Resolution Period*. The coefficients on these variables capture the incremental contingency disclosure during and after the lawsuit, respectively. Based on *Prediction 1*, we expect that $\beta_1 = \beta_2$.

Table 3 presents the results of estimation equation (1), with Panels A and B reporting the results where the dependent variables are quantitative and qualitative, respectively. We find that estimated loss and insurance disclosures increase marginally when the company faces a corporate lawsuit (i.e., when *Sued Period* = 1). Moreover, in Panel B, *N. Words* and *Inestimable Indicator* increase significantly from the benchmark period to the lawsuit period, as does the defensive language referring to a corporate lawsuit (*Defensive Indicator*). Immaterial language tends to decrease during the *Sued Period*. These results provide validation of the measures, which vary predictably during prominent litigation dates. That is, the measures are detecting *what* we hope they will detect precisely *when* we would expect them to detect it.

Our primary test of *Prediction 1* is the *F*-test of coefficient equality for $\beta_1 = \beta_2$. For the quantitative variables, the results reveal a marginally significant *increase* in quantitative contingency disclosure *after* the resolution of the lawsuit relative to during the lawsuit. In particular, in the first 10-K released after the lawsuit is finalized, sued companies report estimated loss contingencies that are more than twice the amounts reporting in their 10-Ks during the sued period; moreover, they are twice as likely to provide an numeric insurance amount after the lawsuit relative to during the lawsuit. For the qualitative variables, the results show a decrease in assertions about the inestimability of the loss amount. In all, the results for *Prediction 1* suggest that firms respond to legal incentives by underreporting legal contingencies during the lawsuit, but increasing reporting transparency once the lawsuit is finalized.

4.2 Contingency Disclosure: Ex-ante Indicators of Loss Probability or Loss Magnitude (Tests of Prediction 2)

We now turn to tests of *Prediction 2*, which is that contingency disclosures should reflect ex-ante indicators of expected loss probability. Our first measure of expected loss is *Settled*, which captures managers initial expectations about the likelihood that a lawsuit is settled, as opposed to dismissed by the courts. We alter equation (1) to include an interaction with *Settled* as follows:

$$\begin{aligned} \textit{Contingency Disclosure}_{i,t} = {} & \alpha_{FE} + \beta_1 \textit{Sued Period}_{i,t} + \beta_2 \textit{Resolution Period}_{i,t} + \beta_3 \textit{Settled}_{i,t} \\ & + \beta_4 \textit{Sued Period} \times \textit{Settled}_{i,t} + \beta_5 \textit{Resolution Period}_{i,t} \times \textit{Settled}_{i,t} + \beta_K \textit{Controls} + \varepsilon_{i,t}. \end{aligned} \quad (2)$$

Based on *Prediction 2*, we expect that β_4 and β_5 are greater than zero, which would indicate that greater expected losses lead to incrementally more disclosure in the litigation event periods. Further, we expect that $\beta_4 = \beta_5$ if firms provide ex-ante disclosure about anticipated settlements.

Table 4 presents the results of this test. In short, the results do not support *Prediction 2* that legal contingency disclosures reflect greater expected losses. The coefficients for $\textit{Sued Period}_{i,t} \times \textit{Settled}$ are positive and significant in only 1 of 7 tests, suggesting that legal contingency disclosures released during the sued period do not vary with ex-ante predictors of expected losses. Further, the coefficients for $\textit{Resolution Period}_{i,t} \times \textit{Settled}$ are positive and significant for 2 of 3 quantitative contingency disclosures, suggesting that sued companies are more likely to disclose loss contingency for settled suits only after the settlement.

In Panel A of Table 4, the *F*-tests for coefficient equality on two measures of quantitative contingency disclosure are highly significant, implying that quantitative legal contingency disclosures *increase*

on average *after* the lawsuit resolved. Further, the magnitude of the difference between during- vs. post-lawsuit disclosure can be quite large. Comparing the interaction terms in Column 1 shows that the likelihood of providing an estimated loss after the lawsuit settles is six times larger than during the lawsuit period. This suggests that sued companies withhold significant information in anticipation of material future settlements. In Panel B, 3 of 4 *F*-tests indicate statistical differences in qualitative disclosure for settled firms after the lawsuit resolves. This finding indicates that among firms that settle the lawsuit, the disclosure patterns change substantially after resolution. For settled lawsuits after resolution, firms remove usage of language related to immateriality and inestimability, and in addition, they increase defensive language. In other words, transparency about the lawsuit increases substantially *after* the resolution of the lawsuit, after the disclosure dilemma has already been resolved.

Next, we employ the motion to dismiss legal claims as a proxy for expected losses. In virtually all lawsuits, defendants will petition the court to dismiss the case as non-meritorious. In many instances, these cases are dismissed by the court. For the others, failure to dismiss means that the likelihood that the firm will settle the claim increases dramatically and, as a result, disclosure of legal contingencies should increase substantially as it crosses the disclosure threshold of "reasonably possible." To empirically capture this effect, we retain a subsample of class-action lawsuits where the lawsuit was eventually settled and for which a denial of dismissal date can be obtained from SCAC. We partition *Sued Period* into two components that capture the sued period prior to the motion to dismiss (*Pre-Denial*) and after the motion has been denied (*Post-Denial*). We alter equation (1) to empirically model this test, as follows:

$$\begin{aligned} \textit{Contingency Disclosure}_{i,t} = {} & \alpha_{FE} + \beta_1 \textit{Pre-Denial}_{i,t} + \beta_2 \textit{Post-Denial}_{i,t} \\ & + \beta_3 \textit{Resolution Period}_{i,t} + \varepsilon_{i,t,} \end{aligned} \tag{3}$$

where all variables are as previously defined. Based on *Prediction 2*, we expect that β_1, β_2, and β_3 are greater than zero and that they are similar in magnitude.

The results of this test are presented in Table 5, and largely fail to support *Prediction 2*. The *F*-tests reveal the coefficients on *Pre-Denial* period are statistically similar to those in the *Post-Denial* period for all quantitative disclosure measures (Panel A) and nearly all qualitative disclosure measures (Panel B). The implication of this finding is that firms do not provide additional contingency disclosure subsequent to being

denied dismissal of the case. In other words, despite the significant reduction in outcome uncertainty, the disclosures remain consistent in both loss estimation and narrative content. Further, comparing the coefficients on *Post-Denial* period to those in coefficients for the *Resolution Period* provides additional evidence that the withheld disclosures are material. The incidence of reported estimated loss contingency after lawsuit is settled is both economically and statistically much higher relative to before (column 1).

In summary, the results of testing *Prediction 2* do not seem to support the notion of disclosure informativeness for contingencies, at least under the definition provided by the FASB. Under the intuition that disclosures made during the resolution period provide a benchmark of the disclosure level that plausibly could have been made ex ante, these results suggest that companies under-report contingent liabilities before the lawsuit is resolved, even for lawsuits where outcome uncertainty is low (i.e., where the company is much more likely to lose the lawsuit and settle for significant amounts).

5. The Predictive Ability of Contingency Disclosures for Lawsuit Outcomes

5.1 Lawsuit Resolution and Contingency Disclosure

Our third prediction relates to the informativeness of contingency disclosures, as captured by their ability to predict lawsuit outcomes. To test prediction, we examine the legal contingency disclosures made in the 10-K released immediately prior to the lawsuit resolution (sample = 925 observations) as this is the period in which firms should have the least estimation uncertainty and has been the subject of primary regulatory scrutiny. We then estimate a linear probability model of the predictive ability of our different measures of qualitative and quantitative contingency disclosure for whether the lawsuit is subsequently settled or dismissed, as follows:

$$Settled_{i,t} = \alpha_{FE} + \beta_J Contingency\ Disclosure_{i,t} + \beta_K Controls + \varepsilon_{i,t}. \quad (4)$$

where *Contingency Disclosure* represents the same vector of contingency-related disclosures as in Equation (3). *Prediction 3* would imply that the disclosure measures, as captured by β_J, should be greater than zero, indicating that increases in firm contingency disclosures signal an increased probability of loss. Due to high collinearity, we do not include the contingency variables all together in the same model. Instead, to consider their joint

effects, we use principle-components analysis (PCA) below (see Table 9). We estimate equation (4) as a linear probability model to allow for the multi-dimensional fixed effects. The control variables are the same, except that we include a control variable, *Filing Date Return*, as a proxy for the information content of the initial legal filing.

Table 6 presents the results of estimating equation (4). The results are largely consistent with *Prediction 3*, most especially for our quantitative variables. Specifically, we find that 2 of 3 individual coefficients in Panel A are positively associated with the likelihood of settlement in the subsequent period. That is, providing an estimated loss contingency in the 10-K filed prior to the lawsuit's resolution is predictive about the eventual outcome of the case. Interestingly, the same can be said of the *Insurance Indicator*, which also predicts subsequent lawsuit outcomes, but the interpretation could be different. On the one hand, it could suggest moral hazard, that firms with adequate insurance ex ante are more willing to settle a lawsuit. On the other hand, it could suggest that companies disclose having insurance to forewarn investors that the legal losses will be partially mitigated by the insurance. Table 6, Panel B also shows that qualitative measures of legal contingency disclosure are predictive of subsequent outcomes, the negative coefficient on *Immaterial Indicator* suggests that firms who avoid disclosure of estimated loss contingencies by claiming immateriality are less likely to ultimately settle. The positive coefficient on *Defensive Indicator* suggests that defensive language surrounding estimated loss contingencies is indicative of perceived vulnerability to future settlement.

5.2 Lawsuit Settlement Amounts and Contingency Disclosure

The next test of *Prediction 3* examines whether our different measures of qualitative and quantitative lawsuits predict the <u>amount</u> of the lawsuit's settlement. We model this test exactly as in Eq (4) except that our dependent variable is now *Settlement Amount*$_{i,t}$. For all lawsuits that were dismissed, we reset *Settlement Amount*$_{i,t}$ to equal zero. All other variables are as previously defined. *Prediction 3* would imply that the disclosure measures, as captured by β_J, should be greater than zero, indicating that increases in firm contingency disclosures signal an increased probability of loss.

Table 7 presents the results which are wholly consistent with Table 6. Specifically we find evidence that both quantitative disclosures (estimated losses and insurance amounts) and qualitative disclosures

(immateriality and defensive language) have predictive value for settlement amounts in the period directly preceding lawsuit resolution.

5.3 Market Reaction to Lawsuit Resolution and Contingency Disclosure

Our final test of *Prediction 3* examines whether our different measures of legal contingency disclosure predict the market reaction to the resolution of the lawsuit. We model this test similar to Equation (4) except that our dependent variable is now *Resolution Day Return*$_{i,t}$, which is the absolute value of the three-day market-adjusted abnormal return centered around the date the lawsuit is resolved. The timing of this test is such that any contingency disclosure precedes the market reaction. *Prediction 3* implies that the disclosure measures should be negatively correlated with the market reaction because greater pre-resolution disclosure levels should reduce information asymmetry.

Table 8 presents the results of our market reactions tests. Panels A and B report the results for quantitative and qualitative measures of disclosure, respectively. Overall, we find very low ability to predict the market reaction to legal resolution and thus *Prediction* 3 is unsupported. We fail to detect an association between any of the measures of legal contingency disclosure and the market reaction to legal resolution of the corporate suit. In untabulated tests, we examined cross-sectional partitions based on the outcome (settled vs dismissed), which yielded similar (non-) results. We also examined alternative measures for the market reaction, including the motion to dismiss date, equal-weighted abnormal returns, signed returns and longer event windows – none of these robustness tests showed that measures of legal contingency disclosure predicted market reactions to legal resolution of the case.

5.3 Principle-Components of Legal Contingency Disclosures

Finally, in Table 9, we combine all legal contingency measures via principle-components analysis to examine their joint predictive ability on the three legal outcomes (settled, settlement amounts, and market reactions). The PCA analysis generally confirm the results in Tables 6 – 8, namely that legal contingency disclosures released in the period just before the lawsuit's resolution are predictive of the lawsuit's outcomes, with the exception of the market reaction to the lawsuit resolution.

In summary, the results of testing our *Prediction 3* suggest that quantitative measures of loss contingencies (and to a lesser degree, qualitative measures) are predictive of lawsuit outcomes and settlement amounts. However, the results also suggest that these same disclosures do not predict the market reaction to the legal resolution of the case. We interpret these results to suggest that the legal disclosures do have predictive value, but not value relevance.

Jointly assessing the results of testing our three predictions, our results suggest that firms do provide some disclosures about expected losses prior to lawsuit resolution which have predictive association with lawsuit outcomes. However, the economically significant differences in magnitude of these disclosures between the sued and resolution periods suggest that the relative informativeness of these disclosures is much lower than it could be absent legal incentives to withhold potentially sensitive information. Thus, we interpret our results as providing evidence that legal incentives significantly encumber contingent liability disclosure decisions.

6. Concluding Remarks

We overcome data limitations of prior research to provide large-scale evidence on the informativeness of loss contingency disclosures. Specifically, we test predictions surrounding (i) the timeliness of disclosures, (ii) the responsiveness of disclosures to changes ex-ante risk of loss, and (iii) the predictive value of such disclosures to ex-post loss realizations and market outcomes. Our results paint a nuanced picture of the informativeness of contingent liability disclosure, which reflect the difficult financial reporting challenge companies face when under litigation. Specifically, while we find that firms do provide some disclosure of estimated of potential losses in advance of their realization, such disclosures do not appear to vary meaningfully with ex-ante predictors of expected losses and are significantly understated relative what they eventually report subsequent to the lawsuit.

These results are troublesome because we do find evidence that contingent liabilities disclosures have important predictive value. That is, firm's quantitative estimates convey predictive information about the likelihood and magnitude of loss. However, against a battery of tests we do not find that these disclosures are

related to market reactions at lawsuit settlement. Thus, again it seems that firms are providing only minimal disclosures, sufficient to avoid regulatory scrutiny but which convey little information to the markets that cannot be obtained elsewhere. Based on these results, we conclude that firms facing litigation balance legal incentives with reporting requirements, which largely leads to less informative contingency disclosures.

References:

Baginski, S. P., Hassell, J. M., & Kimbrough, M. D. (2002). The effect of legal environment on voluntary disclosure: Evidence from management earnings forecasts issued in US and Canadian markets. *The Accounting Review*, 77(1), 25-50.

Barth, M. E., McNichols, M. F., & Wilson, G. P. (1997). Factors influencing firms' disclosures about environmental liabilities. *Review of Accounting Studies*, *2*(1), 35-64.

Banerjee, S., Humphery-Jenner, M., Nanda, V., & Tham, M. (2018). Executive overconfidence and securities class actions. *Journal of Financial and Quantitative Analysis*, 53(6), 2685-2719.

Bhagat, S., & Romano, R. (2002). Event studies and the law: Part I: Technique and corporate litigation. *American Law and Economics Review*, 4(1), 141-168.

Cazier, R. A., Merkley, K. J., & Treu, J. S. (2019). When are Firms Sued for Qualitative Disclosures? Implications of the Safe Harbor for Forward-Looking Statements. *The Accounting Review*.

CFA Institute (2013). Financial reporting disclosures: Investor perspectives on transparency, trust and volume. ISBN 978-0-938367-76-5

Cen, L., Chen, F., Hou, Y., & Richardson, G. D. (2017). Strategic disclosures of litigation loss contingencies when customer-supplier relationships are at risk. *The Accounting Review*, *93*(2), 137-159.

Chen, C. W., Collins, D. W., Kravet, T. D., & Mergenthaler, R. D. (2018). Financial statement comparability and the efficiency of acquisition decisions. *Contemporary Accounting Research*, 35(1), 164-202.

Choi, S. Nelson, K., & Pritchard, A. (2009). The Screening Effect of the Private Securities Litigation Reform Act." *Journal of Empirical Legal Studies*, 6 (2009), 35–68.

Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, organizations and society*, *33*(4-5), 303-327.

Cohen, D., Darrough, M. N., Huang, R., & Zach, T. (2011). Warranty reserve: Contingent liability, information signal, or earnings management tool? *The Accounting Review*, *86*(2), 569-604.

Deloitte LLP (2019). SEC Comment Letters — Including Industry Insights. Available at: https://www2.deloitte.com/us/en/pages/audit/articles/a-roadmap-to-sec-comment-letter-considerations-including-industry-insights.html

Dennis, D. M., & Keith, R. M. (1981). Are litigation disclosures inadequate? The authors recommend that companies disclose more, or more explicit, data on lawsuits in progress. *Journal of Accountancy* (pre-1986), 151(000003), 54.

Desir, R., Fanning, K., & Pfeiffer, R. J. (2010). Are revisions to SFAS No. 5 needed?. *Accounting Horizons*, 24(4), 525-545.

Donelson, D. C., McInnis, J. M., & Mergenthaler, R. D. (2012). Rules-based accounting standards and litigation. *The Accounting Review*, 87(4), 1247-1279.

Donelson, D., C., Flam, E. & Yust, C. (2019). Spillover effects in securities litigation. Working paper, University of Texas at Austin.

Dyer, T., Lang, M., & Stice-Lawrence, L. (2017). The evolution of 10-K textual disclosure: Evidence from Latent Dirichlet Allocation. *Journal of Accounting and Economics*, 64(2-3), 221-245.

Francis, J., Philbrick, D., & Schipper, K. (1994). Shareholder litigation and corporate disclosures. *Journal of Accounting Research*, 32(2), 137-164.

Fesler, R. D., & Hagler, J. L. (1989). Litigation disclosures under SFAS No. 5: A study of actual cases. *Accounting Horizons*, 3(1), 10.

Field, L., Lowry, M., & Shu, S. (2005). Does disclosure deter or trigger litigation? *Journal of Accounting and Economics*, 39(3), 487-507.

Frankel, R. M., Johnson, M. F., & Nelson, K. K. (2002). The relation between auditors' fees for nonaudit services and earnings management. *The Accounting Review*, 77(s-1), 71-105.

Gande, A., & Lewis, C. M. (2009). Shareholder-initiated class action lawsuits: Shareholder wealth effects and industry spillovers. *Journal of Financial and Quantitative Analysis*, 44(4), 823-850.

Gleason, C. A., & Mills, L. F. (2002). Materiality and contingent tax liability reporting. *The Accounting Review*, *77*(2), 317-342.

Gormley, T. A., Matsa, D. A., & Milbourn, T. (2013). CEO compensation and corporate risk: Evidence from a natural experiment. *Journal of Accounting and Economics*, 56(2-3), 79-101.
Haslem, B. (2005). Managerial opportunism during corporate litigation. *The Journal of Finance*, 60(4), 2013-2041.
Hennes, K. M. (2014). Disclosure of contingent legal liabilities. *Journal of Accounting and Public Policy*, 33(1), 32-50.
Holder, A. D. and K. E. Karim. 2012. Loss contingencies face controversy in convergence. *CPA Journal* 82 (1): 34–39.
Johnson, M. F., Kasznik, R., & Nelson, K. K. (2000). Shareholder wealth effects of the private securities litigation reform act of 1995. *Review of Accounting Studies*, 5(3), 217-233.
Karpoff, J. M., Lee, D. S., & Martin, G. S. (2008). The consequences to managers for cooking the books. *Journal of Financial Economics*, 88(88), 193-215.
Kennedy, J., Mitchell, T., & Sefcik, S. E. (1998). Disclosure of contingent environmental liabilities: some unintended consequences?. *Journal of Accounting Research*, 36(2), 257-277.
Kim, I., & Skinner, D. J. (2012). Measuring securities litigation risk. *Journal of Accounting and Economics*, 53(1-2), 290-310.
Lennox, C. S., & Park, C. W. (2006). The informativeness of earnings and management's issuance of earnings forecasts. *Journal of Accounting and Economics*, 42(3), 439-458.
Little, P., Muoghalu, M.I., Robison, H.D., 1995. Hazardous waste lawsuits, financial disclosure, and investors' interests. *Journal of Accounting, Auditing and Finance* 10 (2), 383–398.
Loughran, T., & McDonald, B. (2014). Measuring readability in financial disclosures. *The Journal of Finance*, 69(4), 1643-1671.
Matsumoto, D. A. (2002). Management's incentives to avoid negative earnings surprises. *The Accounting Review*, 77(3), 483-514.
Nelson, M. W., & Kinney Jr, W. R. (1997). The effect of ambiguity on loss contingency reporting judgments. *The Accounting Review*, 257-274.
Rogers, J. L., & Van Buskirk, A. (2009). Shareholder litigation and changes in disclosure behavior. *Journal of Accounting and Economics*, 47(1-2), 136-156.
Rogers, J., A. Van Buskirk, and S. Zechman. 2011. Disclosure Tone and Shareholder Litigation. *The Accounting Review* 86 (6): 2155-2183.
Skinner, D. J. (1994). Why firms voluntarily disclose bad news. *Journal of Accounting Research*, 32(1), 38-60.
Skinner, D. J. (1997). Earnings disclosures and stockholder lawsuits. *Journal of Accounting and Economics*, 23(3), 249-282.

Appendix 1- Variable Definitions

Variable Name	Description	Source
Estimated Loss Indicator$_{it}$	An indicator variable for if the litigious paragraphs (Appendix 3) of a firm's 10-K contain a sentence that references an accrual and contains a number, or if the litigious paragraphs contain a range of numbers.	10-K for the firm-year
Claim Indicator$_{it}$	An indicator variable for if the litigious paragraphs of a firm's 10-K contain a sentence that references a claim and contains a number.	10-K for the firm-year
Insurance Indicator$_{it}$	An indicator variable for if the litigious paragraphs of a firm's 10-K contain a sentence that references an insurance policy and contains a number.	10-K for the firm-year
N. Words$_{it}$	The number of words in a firm's litigious paragraphs scaled by the total number of words in the 10-K	10-K for the firm-year
Immaterial Indicator$_{it}$	An indicator variable for if a litigious paragraph contains a negation of the word material, and the *Estimated Loss Indicator* =0	10-K for the firm-year
Inestimable Indicator$_{it}$	An indicator variable for if a litigious paragraph contains a negation of the words "estimable", "predict", or "assurance" and the *Estimated Loss Indicator* =0	10-K for the firm-year
Defensive Indicator$_{it}$	An indicator variable for if a litigious paragraph contains a negation of the words "material", "estimable", "predict", or "assurance" and the *Estimated Loss Indicator* =1	10-K for the firm-year
Sued Period$_{it}$	An indicator variable for if a 10-K comes out after the Filing Date, but before the Resolution Date.	Stanford Class Action Clearinghouse, Audit Analytics, Compustat
Resolution Period$_{it}$	An indicator variable for the first 10-K after a lawsuit was settled.	Stanford Class Action Clearinghouse, Audit Analytics, Compustat
Litigation Risk$_{it}$	A firm-year measure of litigation risk, as developed by Kim and Skinner (2012). In particular, we use a modified version of their model 2, defined as the following: -7.178 + 0.180*FPS + 0.463*LNASSETS$_{t-1}$ (*at*) + .553*SALES GROWTH$_{t-1}$ (*revt*$_{t-1}$-*revt*$_{t-2}$)/*at*$_{t-2}$ - .498*ARET$_t$ (*ret-vwretd*) -.359*RETURN SKEWNESS$_t$ (*ret*) + 14.437*RETURN STD DEV$_t$. FPS are lawsuit-intensive industries and return skewness and standard deviation based on monthly returns. Missing values are backfilled with the industry-year mean.	Kim & Skinner (2012), Compustat, CRSP
BTM$_{it}$	Book Value of Equity divided by Market Value of Equity (*ceq*/(*prcc_f***csho*))	Compustat
Return on Assets$_{it}$	Income before Extraordinary Items divided by Total Assets (*ib/at*)	Compustat
Leverage$_{it}$	Total Liabilities/Total Assets (*lt/at*)	Compustat
Market Cap$_{it}$	Market Value of Equity (*prcc_f***csho*)	Stanford Class Action Clearinghouse, Lawsuit Settlement, Compustat
Settlement Amount$_i$	The Settlement Amount (logged) of the lawsuit. Hand collected for SCAC from the lawsuit court dockets. Provided by Audit Analytics.	Stanford Class Action Clearinghouse, Audit Analytics, Compustat
Settled$_{it}$	An indicator variable that is 1 if the lawsuit is settled out of favor for the company and 0 if it is dismissed.	Stanford Class Action Clearinghouse, Audit Analytics, Compustat
Filing Date Return$_{it}$	Cumulative abnormal return over the CRSP value-weighted return from [-10,1] around the Filing Date of the Lawsuit.	Stanford Class Action Clearinghouse, Audit Analytics, Compustat, CRSP
Resolution Date Return$_{it}$	Cumulative abnormal return over the CRSP value-weighted return from [-1,1] around the Settlement Date of the Lawsuit.	Stanford Class Action Clearinghouse, Audit Analytics, Compustat, CRSP

Appendix 2 –

A2.1 Accounting for Legal Contingent Liabilities

Many companies are involved in ongoing litigation for which the outcome is uncertain, which presents the company with several disclosure challenges, including whether to disclose the potential loss, when to disclose it, and how much the potential loss is worth. A legal contingent liability captures the potential loss related to the uncertain future outcome of the litigation. The key word here is uncertain—not uncertainty with regard to the event that led to the lawsuit, but rather uncertainty related to the chance that the litigation settles out of favor for the company. While other potential liabilities do not exhibit significant uncertainty regarding future cash outflows (e.g., the payments on long-term notes are typically well-defined), loss contingencies exhibit significant uncertainty as to whether or not any obligation exists at all.

To deal with this uncertainty, accounting standards require the company to assess the probability and potential magnitude of an uncertain loss prior to the actual resolution of the lawsuit. Specifically, the recognition and disclosure requirements for contingent liabilities are determined under ASC 450-20 based on a three-tier probabilistic assessment of loss uncertainty as one of: 1) probable, 2) reasonably possible, or 3) remote. Probable losses require disclosure and, if the loss is reasonably estimable, recognition in the financial statements. Reasonably possible losses require disclosure and remote probability losses need not be accounted for. Pragmatically, there is a high threshold associated with recognition; "probable" is often interpreted to mean 75% or greater likelihood.[26] Moreover, it can be difficult to "reasonably estimate" the amount of potential losses in the face of significant outcome uncertainty. Thus, in expectation, the majority of financial statement information available to users about contingent liabilities should be conveyed through disclosures rather than through recognition. ASC 450 does not provide detailed prescriptions of what exactly should be disclosed, but specifies that disclosures should include "the nature of the contingency" and either an "estimate of the possible loss or range of loss or a statement that such an estimate cannot be made" (ASC 450-20-50-4). Additionally, SEC Regulation SK specifies that corporations must also provide disclosure of relevant publicly available facts including damages sought (i.e. claims) for any "material" legal proceedings (Section 229.103).

One of the challenges with contingent liabilities disclosure, however, is that it is possible for the disclosure itself to increase the probability of future losses. In particular, in cases of pending or threatened litigation, companies are wary of providing substantial or detailed disclosures related to the uncertain lawsuit, which could be interpreted as an admission of guilt and therefore prejudicial to an entity's legal position. For example in a letter to the FASB, the American Bar Association notes that any estimate of potential exposure that the entity provides can "tip the reporting entity's hand…and it will almost certainly distort the course of possible settlement or resolution by putting a floor under the amount that will be required to resolve the matter."[27] Disclosure of certain amounts such as insurance or claims may similarly bias case outcomes. Donelson, Hopkins and Yust (2018) provide evidence that additional required disclosure of insurance premiums is associated with more frivolous securities litigation. Furthermore, disclosing information about a potential lawsuit can alter what is legally discoverable based on the "work product doctrine".[28] Under the work product doctrine, most information between an attorney, client, and non-adversarial third parties (e.g., auditors) is non-discoverable. As soon as that information is disclosed in a financial statement, however, that protection is broken, allowing opposing lawyers to subpoena information used to generate the loss contingency from the company and possibly its auditor. For example, any disclosures provided to contextualize a claim amount, might open the door for expanded discovery.[29] In summary, the substantive disclosure of facts or estimates surrounding legal contingencies likely subjects the firm to substantial additional legal risk.

In light of these concerns, companies may resort to less informative disclosure techniques, such as under-reporting of legal contingencies, failure to accrue an estimated loss liability, or omitting relevant quantitative disclosures of claims and insurance amounts. Similarly, firms may have incentives to downplay the potential merits of outstanding litigation through defensive language or may leverage materiality or inestimability exemptions to avoid the timely disclosure and recognition of future losses until settlement outcomes are reasonably certain. In other words, firms will disclose *strategically* to balance legal incentives to withhold information with reporting incentives to provide adequate and timely legal contingency information to stakeholders. In line with this argument, Cen, Chen, Hou and Richardson (2017) find evidence of strategic contingency disclosure trade-offs in the face supplier litigation risk. Indeed, some investor groups argue that the accounting standards

[26] https://www.pwc.fr/fr/assets/files/pdf/2018/01/ifrs15/pwc-revenue-from-contracts-with-customers-industry-supplement-communications.pdf

[27] https://www.fasb.org/cs/BlobServer?blobkey=id&blobnocache=true&blobwhere=1175818387660&blobheader=application%2Fpdf&blobheadername2=Content-Length&blobheadername1=Content-Disposition&blobheadervalue2=1853808&blobheadervalue1=filename%3D52265.pdf&blobcol=urldata&blobtable=MungoBlobs

[28] https://jenner.com/system/assets/assets/3215/original/ABA.pdf?1319481053

[29] US Chamber of Commerce comment letter to the FASB (#13A) proposed ASU "Disclosure of Certain Loss Contingencies" 2010

specifically permit strategic contingency disclosure, allowing "…companies to avoid recognition, measurement and disclosure of …contingencies" (p. 90; CFA Institute, 2013).

A2.2 Standard Setting and Regulatory Debate on the Accounting for Legal Contingent Liabilities

Whether or not firm disclosures made in advance of legal resolution are adequately informative and timely in practice has garnered significant regulatory attention. The SEC directly addressed this tension in its 2006 annual report on "Current Accounting and Disclosure Issues," acknowledging the need for firm disclosures to balance confidentiality concerns with the needs of users to gain a clear understanding of potential future losses. However, the report went on to stress the importance of advance warning, stating that "circumstances where a loss was accrued for a claim without disclosure in prior filings…should be rare".[30]

The FASB has expressed similar concerns. In 2008, citing user concern that current disclosures lacked information content relevant to the assessment of future cash flows, the FASB issued an exposure draft intended to expand and enhance disclosure of loss contingencies.[31] The proposal would have required disclosure of all contingent liabilities that might have "severe impact on the entity's financial position, cash flows, or results of operations" regardless of the likelihood of loss. In addition, the FASB proposal would have expanded both quantitative and qualitative disclosures and formalized the expectation for "over-the-life-cycle" disclosures that increased in robustness as the contingency neared settlement. However, the FASB's proposal was met with overwhelming disapproval from auditors, lawyers and preparers who remained concerned about the potential for increased exposure to adverse litigation outcomes, despite specific provisions designed to shield firms from specific disclosure of prejudicial information. The FASB revised the exposure draft in 2010, but it too met with severe criticism, and ultimately the project was discontinued.

Opponents of the FASB exposure draft contended, and the Board ultimately concurred, that the fundamental issue was not the accounting standard itself but an overall lack of compliance with existing disclosure requirements. The SEC during that same period had been aggressively targeting contingent liability disclosures in staff speeches[32] and through hundreds of comment letters on the subject.[33] In particular the SEC highlighted the lack of "early-warning" disclosures preceding the resolution of loss contingencies as well as unsubstantiated statements about the inestimable nature of potential loss amounts as target issues for non-compliance.[34] In announcing its decision to stop work on the project, the FASB expressed optimism that increased regulatory scrutiny would result in more robust compliance with existing guidelines. In particular, they noted that disclosures had improved as a result the SEC's 2010 "Dear CFO" letter asking for improved disclosure about loss contingencies.[35] However, the Board also left open the option to consider improving loss contingencies disclosure as part of its broader disclosure frameworks project.[36]

The issue has also garnered significant attention on the international stage. In 2005, the IASB issued an exposure draft which would have required entities to recognize a liability for every lawsuit regardless of the assessed probability of negative outcome, which led to intense criticism.[37] In response, the proposal was softened in 2010 to require only recognition of those lawsuits deemed meritorious by management, but this did little to allay preparer concerns; the IASB ultimately dropped the project.

In more recent years, the topic of contingent liabilities has resurfaced. In the FASB's current *Conceptual Framework: Elements* project, the board is discussing a refinement to the definition of a liability, including that of a contingent liability. In 2015, the IASB initiated an ongoing research project to assess the need for targeted revisions to IAS 37. Additionally, SEC attention to the informativeness of loss liability disclosures has remained high. In 2016, the SEC filed the first ever lawsuit against a firm for failure to disclose loss contingencies[38] and such disclosures continue to be a common subject of SEC comment letters (Deloitte, 2019).

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[30] https://www.sec.gov/divisions/corpfin/cfacctdisclosureissues.pdf

[31] https://www.fasb.org/ed_contingencies.pdf

[32] Current Accounting and Disclosure Issues Outline (Nov. 30, 2006), at http://www.sec.gov/divisions/corpfin/cfacctdisclosureissues.pdf. ; Wayne Carnall, Chief Accountant, Division of Corporation Finance, Slide Presentation (PDF): Remarks before the 2010 AICPA Conference on Current SEC and PCAOB Developments, Washington, D.C. (Dec. 7, 2010)("AICPA Slide Deck"), available at http://www.sec.gov/divisions/corpfin/cfspeeches.shtml.

[33] http://blogs.reuters.com/alison-frankel/2012/07/11/accounting-board-drops-call-for-beefed-up-litigation-risk-disclosure/ citing http://newsandinsight.thomsonreuters.com/Legal/News/2011/02_-_February/SEC_cracks_down_on_disclosure_of_lawsuit_costs/

[34] https://corpgov.law.harvard.edu/2011/03/15/sec-disclosure-and-corporate-governance-financial-reporting-challenges-for-2011/

[35] https://blogs.wsj.com/cfo/2012/07/10/fasb-dumps-loss-contingency-disclosure-project/

[36] http://cfodirect.pwc.com/CFODirectWeb/Controller.jpf?ContentCode=THUG-8W2QXD&SecNavCode=MSRA-84YH44&ContentType=Content

[37] https://www.ifrs.org/-/media/project/provisions/2005-ed/ed-amendments-to-ias-37.pdf

[38] https://www.sec.gov/litigation/complaints/2016/comp23639.pdf

Thus, the informativeness of contingent liability disclosures remains a pressing question for both regulators and standard setters. On the one hand, regulatory attention has increased markedly over the last decade suggesting strong incentives for improved disclosure. On the other hand, tension between the competing information demands of shareholders and the proprietary nature of ongoing litigation may curtail firms' willingness to provide truly informative disclosures.

Appendix 3 - Algorithm to Scrape, Parse and Measure Contingent Liability Disclosure

Part 1: Item 3 and Commitments & Contingencies Footnote Identification

1. Identify the CIK numbers for all potential lawsuits in Audit Analytics and SCAC during the sample years (2002-2018).
2. Collect all 10-K's from 2005-2018 associated with each unique CIK.
3. Convert the 10-K text to lower case.
4. Replace any excessive space (i.e. ' ') with a '\n' in order to identify the start of a new line.
5. Use Regular Expressions (RegEx) to find the root words "item", "note", "commit", and "conting", and remove unrelated characters.
6. Use RegEx to identify the index of each '\n' and the phrase "item 3" (i.e. '\n *item *[\n]* *3[^0-9]'). The '\n' ensures that the algorithm only identifies when "item 3" begins a new line.
    a. As an aside here, with text, we may identify each character by an index. So with the word "account", I can pick out (begin counting with 0) the letter "u" at index number 4. The RegEx lets us identify the starting index of a phrase like "item 3".
7. Do the same for item 4 and item 5.
8. For each instance of item 3, find the index of the next closest instance of item 4 or 5. Scrape all text between the index of item 3 and index of item 4 or 5. This will represent Item 3.
9. Within Item 3, identify if the word note, is followed by a digit. (i.e. 'note ?[0-9]+')
10. While Item 3 has a very consistent formatting, the commitments and contingencies footnote does not. In order to minimize both false positives and false negatives we follow a stepped else-if procedure to identifying the commitments and contingencies footnote. In other words, we create a series of strategies to identify the text of the footnote. Then, beginning with the most stringent text identification strategy, we attempt to identify the footnote, and if we fail to find any instance that meets its conditions, we move to a slightly less stringent strategy.
11. We start by identifying if the word "note" is mentioned followed by a digit within item 3. If it is, then all strategies will require that specific number to be identified. If it is not, then the text identification strategy will allow any one or two digit number to be identified. Furthermore, we require that every phrase begin with a '\n', and to not follow the words "see", "in", or "under" because those words indicate that the item is being mentioned within the context of a different paragraph.
    a. As an aside, when scraping text, if a note was identified in item 3, then we can stop when the next number (following a "/n") is mentioned without worrying about the word "note"; however, if no note is identified, then to minimize false positives, we must stop when the word "note" followed by a number is next identified.
    b. A sample piece of RegEx is as follows: '\n[ ]*(note)?[\n]*[ ]*[\n ,\./:;"()\[\]\-]*{}[\n,\./:;"()\[\] \-]*((commitm)|(conting))'
    c. Furthermore, in the case where multiple instances are identified they are appended together unless one is a subset of the other. If one is a subset, then the subset is dropped to prevent duplication.
12. The strategies, in order, are as follows:
    a. (If identified in Item 3) The word "note" followed by the specific number identified.
    b. (If not identified in item 3) The word "note", followed by a digit, followed by either the root "commit" or the root "conting".
    c. Do not require the word note, but pull from a number, followed by the root "commit" or the root "conting".
    d. Require the word note, but pull from a number, followed by the root "litig".
    e. Do not require the word note, but pull from a number, followed by the root "litig".
    f. Require the word note, but pull from a number, followed by the root "legal p".
    g. Do not require the word note, but pull from a number, followed by the root "legal p".
13. Whatever is identified in step 12 we will call the commitment and contingencies footnote. Clean all HTML from the commitments and contingencies footnote and Item 3.

Part 2: Identify Legal Paragraphs and Construct Measures

1. When we want to understand litigation disclosure, we want to make sure that we are not accidentally identifying other information. For the most part, item 3 legal proceedings only deals with litigation or potential litigation (including

fines). Therefore, we will classify everything identified in Part 1 as part of Item 3 as part of our "legal paragraphs". The commitment and contingencies footnote however also contains other information such as leases.

2. To parse out the litigation information, we identify all paragraphs that contain one of the words/roots from (a) below, but do not contain one of the word/roots from (b) below. In other words, each paragraph in the commitments and contingencies footnote must meet two conditions.
    a. 'legal','claim','v.','district','subpoe','violat','court','lawsuit','damages','criminal', 'complaint','disgorg','counter','infringement','asbestos','suit','alleg','injuct','judgement', 'arbitrat','defendant','plaintiff','ordinary course', 'factual', 'litig' ,'class action', 'plead'
    b. ' lease','warrant','guarantor'
        i. Note that lease has a space in front to prevent words such as "release"
3. In order to prevent errors, we eliminate the 10-K's with the top and bottom 1% of Item 3 length and commitment and contingencies paragraph length.
4. Because frequently firms will state in Item 3 legal proceedings to see their commitment and contingencies footnote (or vice versa), or will simply place the same thing in both places, we do not distinguish between information placed in both places. In order to prevent duplication of text, we check the cosine similarity between Item 3 and the foonote's identified paragraphs. If the cosine similarity is above 90%, then we simply take the item 3. If not, we append the two together and call it the 10-K's "litigious paragraphs"
5. Split the paragraphs into sentences.
6. From the sentences identify if there is a sentence that has a negation within the same sentence of the roots "estima", "predict", and "assurance" to identify inestimable language.
    a. By negation, we mean either a negative form of the word, or a negative word within the same sentence such as "no", "not", "none", etc.
7. From the sentences identify if there is a sentence that has a negation within the same sentence of the word "material" to identify immaterial language.
8. To create our Estimated Loss, Insurance, and Claim Indicator, we keep only those sentences that contain a "$" and do not contain the word "fine". Using the word lists below, the identification is as follows. Estimated Loss Indicator =1 if a sentence contains a word from the accrual word list, but not one from the claim words list. Insurance Indicator= 1 if a sentence contains a word from the insurance word list, but no words from the accrual word list or the claim word list. Claim Indicator =1 if a sentence contains a word from the claim word list but not from the insurance word list or accrual word list.
    a. Claim Words='seek','claim','pursu','alleg','assert','request', 'rang','between'
    b. Accrual Words='record','estimate','accru','reserv'
    c. Insurance Words='insur','indem','underwr','deduct'
9. Using the litigious paragraphs from before, stem and lemmatize the paragraph, then count the remaining number of stem and lemmatized words. Take the natural log of this number for the variable N. Words.
10. The inestimable indicator is generated if a 10-K contains inestimable language but no accrual. The immaterial indicator is generated if a 10-K contain immaterial language but not accrual. The defensive indicator is generated if there is immaterial or inestimable language and an accrual is made.
11. We now have our 6 text-based variables (Estimated Loss Indicator, Insurance Indicator, Claim Indicator, N. Words, Inestimable Indicator, Immaterial Indicator, and Defensive Indicator). From here, we can begin merging on to Compustat.

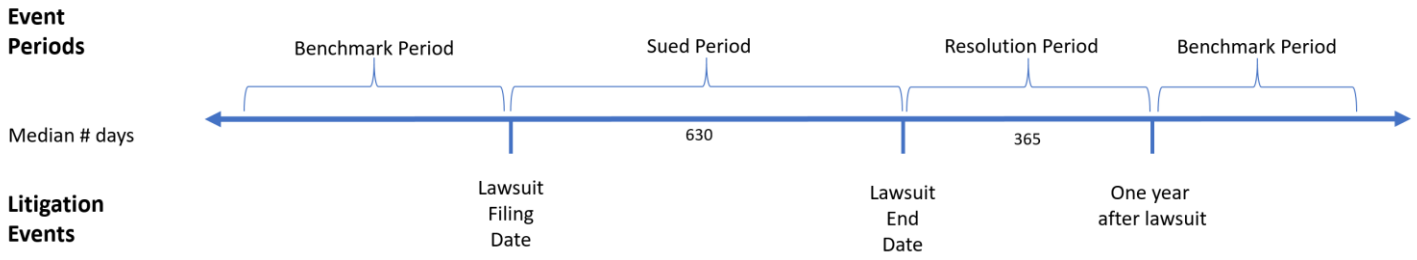
Table 1 – Sample Composition and Event Dates

Panel A: Sample Composition

Criteria	# Lawsuits	# Firm-years
All settled or dismissed lawsuits filed during 2003-2018:	4,665	
Less: Lawsuits never in Compustat or Remanded/Consolidated	(1,427)	
	3,238	
Less: Lawsuits that do not have CRSP data	(976)	
	2,262	
Less: Lawsuits that do not merge to Compustat	(789)	
	1,473	15,060
Less: Firms without a 10-K release during *Sued Period*	(540)	(4,936)
	933	10,124
Less: Firms missing controls	(8)	(279)
Final Sample	925	9,845

Our sample is composed of firms subjected to large corporate lawsuits, as identified in the Stanford University's Securities Corporate Clearinghouse (SCAC) database, Audit Analytics, and Bloomberg Law. From this sample, we retain lawsuits filed between 2003 and 2018. We also impose the following data requirements: we remove any additional lawsuits that are still ongoing or have been remanded; we require firms to have test/control variables from Compustat and CRSP, and we remove firms with multiple overlapping lawsuits to aid in identification of which disclosure belongs to which lawsuit. The final sample for our primary analysis comprises 481 lawsuits over 5,012 firm-years.

Panel B: Lawsuit Dates and Event Period Definitions



Event Periods:

- *Benchmark Period* = the time period before the corporate lawsuit is filed, as well as the time period after the Resolution Period.
- *Sued Period* = an indicator equal to 1 during the time between the filing of the corporate lawsuit (Lawsuit Filing Date) and 1 year prior to the conclusion of the lawsuit (Lawsuit End Date), and 0 otherwise. Dates are provided by SCAC or Audit Analytics.
- *Resolution Period* = an indicator equal to 1 during the one-year period subsequent to the conclusion of the corporate lawsuit (Lawsuit End Date), and 0 otherwise.

Litigation Events:

- Lawsuit Filing Date = the date on which the corporate lawsuit is filed in court, as identified by SCAC.
- Lawsuit End Date = for dismissed cases, the date on which a lawsuit is dismissed by a judge; for settled cases, the date a preliminary settlement agreement is agreed to by a court or if no settlement is submitted, it is the date that a judgement was rendered. All dates are as reported by Audit Analytics or hand-collected from legal court dockets from SCAC or Bloomberg Law as needed.

Table 2 – Descriptive Statistics and Correlations

Panel A: Descriptive Statistics

Dependent Variables	**N. Obs**	**Mean**	**SD**	**Q1**	**Median**	**Q3**
Estimated Loss Indicator	9,845	0.27	0.45	0	0	1
Claim Indicator	9,845	0.30	0.46	0	0	1
Insurance Indicator	9,845	0.11	0.31	0	0	0
N. Words	9,845	0.01	0.01	0.00	0.01	0.02
Immaterial Indicator	9,845	0.56	0.50	0	1	1
Inestimable Indicator	9,845	0.38	0.49	0	0	1
Defensive Indicator	9,845	0.26	0.44	0	0	1
Independent Variables						
Sued Period	9,845	0.21	0.41	0	0	0
Resolution Period	9,845	0.06	0.24	0	0	0
Settled	9,845	0.46	0.50	0	0	1
Settlement Amount	9,845	5.93	8.04	0.00	0.00	15.61
Resolution Date Return	9,736	0.03	0.04	0.01	0.02	0.04
Filing Date Return	9,845	-0.05	0.14	-0.08	-0.02	0.02
Litigation Risk	9,845	36.99	119.48	0.30	2.16	14.36
BTM	9,845	4.12	5.86	1.52	2.53	4.41
Leverage	9,845	0.56	0.24	0.38	0.57	0.74
Return on Asset	9,845	0.00	0.19	0.00	0.03	0.08
Market Cap	9,845	8.28	2.31	6.64	8.24	9.98

Panel B: Correlations

#	**Variable**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
1	*Estimated Loss Indicator*	1.00																	
2	*Claim Indicator*	0.31	1.00																
3	*Insurance Indicator*	0.24	0.27	1.00															
4	*N. Words*	0.31	0.34	0.24	1.00														
5	*Immaterial Indicator*	-0.70	-0.16	-0.14	-0.14	1.00													
6	*Inestimable Indicator*	-0.48	0.01	-0.04	0.13	0.49	1.00												
7	*Defensive Indicator*	0.97	0.32	0.24	0.32	-0.68	-0.47	1.00											
8	*Sued Period*	0.04	0.02	0.03	0.10	-0.05	0.09	0.04	1.00										
9	*Resolution Period*	0.03	0.03	0.03	0.04	-0.03	0.01	0.02	-0.13	1.00									
10	*Settled*	0.05	0.06	0.09	0.07	-0.05	0.03	0.05	0.14	0.03	1.00								
11	*Settlement Amount*	0.05	0.06	0.09	0.06	-0.07	0.01	0.04	0.11	0.03	0.80	1.00							
12	*Resolution Date Return*	-0.05	-0.04	-0.05	-0.03	0.04	-0.03	-0.05	-0.01	0.01	-0.02	0.01	0.00						
13	*Filing Date Return*	0.04	0.05	0.01	0.06	0.00	0.02	0.05	0.00	-0.02	-0.10	-0.14	1.00	0.00					
14	*Litigation Risk*	0.09	0.25	0.15	0.05	-0.05	0.02	0.10	0.02	0.00	0.10	0.14	0.04	1.00	0.00				
15	*BTM*	-0.07	-0.10	-0.09	-0.01	0.03	0.01	-0.07	0.00	0.01	-0.05	-0.06	-0.03	-0.11	1.00	0.00			
16	*Leverage*	0.10	0.19	0.10	0.03	-0.04	-0.01	0.10	0.05	0.02	0.02	0.02	0.10	0.36	0.13	1.00	0.00		
17	*Return on Assets*	0.07	0.04	0.02	0.12	0.03	0.05	0.07	-0.04	-0.04	-0.06	-0.07	0.28	0.03	-0.03	0.07	1.00	0.00	
18	*Market Cap*	0.11	0.16	0.08	0.18	-0.06	0.05	0.11	0.05	0.00	-0.01	0.00	0.25	0.40	0.08	0.33	0.43	1.00	1.00

This table presents descriptive statistics and correlations for the variables used in this study. Panel A presents univariate descriptive statistics for dependent and independent variables of interest—all variables are as defined in Appendix 1. All continuous variables are winsorized at the 1st and 99th percentiles. Panel B presents Pearson correlations for the variables used in the study.

Table 3 – Contingent Liabilities Disclosure around Lawsuit Events

Panel A	***Estimated Loss Indicator***	***Claim Indicator***	***Insurance Indicator***
Variables	(1)	(2)	(3)
Sued Period	0.028*	0.021	0.025**
	(1.652)	(1.302)	(1.975)
Resolution Period	0.057***	0.056***	0.052***
	(2.837)	(2.938)	(3.258)
Litigation Risk	0.000	0.001***	0.000
	(1.416)	(4.963)	(1.309)
BTM	-0.007***	-0.007***	-0.004***
	(-4.874)	(-4.773)	(-4.070)
Leverage	0.191***	0.262***	0.058
	(2.693)	(4.255)	(1.567)
ROA	0.085	0.008	-0.016
	(1.623)	(0.176)	(-0.505)
Market Cap	0.009	0.009	0.005
	(1.019)	(1.244)	(0.852)
Fixed Effects	Industry-Year	Industry-Year	Industry-Year
Cluster std. errors	Firm	Firm	Firm
N	9,845	9,845	9,845
Adjusted R-Squared	0.077	0.128	0.067
Sued Period = Resolution Period (*p*-value)	0.144	0.0726	0.0728

Panel B	***N. Words***	***Immaterial Indicator***	***Inestimable Indicator***	***Defensive Indicator***
Variables	(1)	(2)	(3)	(4)
Sued Period	0.004***	-0.055***	0.093***	0.029*
	(6.655)	(-2.851)	(4.759)	(1.782)
Resolution Period	0.004***	-0.063***	0.022	0.046**
	(5.945)	(-2.963)	(0.982)	(2.282)
Litigation Risk	0.000	-0.000	-0.000	0.000
	(0.190)	(-0.842)	(-0.201)	(1.535)
BTM	-0.000	0.004**	0.002	-0.007***
	(-1.220)	(2.049)	(0.843)	(-4.877)
Leverage	0.003	-0.114	-0.084	0.198***
	(1.189)	(-1.351)	(-1.194)	(2.790)
ROA	0.004***	0.135*	0.097*	0.087*
	(2.618)	(1.956)	(1.793)	(1.667)
Market Cap	0.001***	-0.013	0.007	0.008
	(3.411)	(-1.205)	(0.891)	(0.977)
Fixed Effects	Industry-Year	Industry-Year	Industry-Year	Industry-Year
Cluster std. errors	Firm	Firm	Firm	Firm
N	9,845	9,845	9,845	9,845
Adjusted R-Squared	0.120	0.049	0.041	0.082
Sued Period = Resolution Period (*p*-value)	0.887	0.713	0.00258	0.418

This table presents results of regressions of measures of litigation-related disclosure on indicators for events related to corporate lawsuits. The dependent variables capture contingency disclosure scraped from the firm's 10-K each period, hence the unit of observation is firm-year. The primary independent variables of interest are: *Sued Period* and *Resolution Period*, as well as the *F*-test for coefficient equality between the two coefficients. Appendix 1 provides definitions for all variables. The model includes multi-dimensional fixed effects for industry-year in certain estimations, where industry definitions are based on the Fama-French 17 definitions and year is based on fiscal year. T-statistics based on firm-clustered standard errors are shown in parentheses. All continuous variables are winsorized at the 1st and 99th percentiles.

Table 4 – Contingent Liabilities Disclosure around Lawsuit Events: Settled vs. Dismissed Lawsuits

Panel A	***Estimated Loss Indicator***	***Claim Indicator***	***Insurance Indicator***
Variables	(1)	(2)	(3)
Settled	0.009	0.022	0.018
	(0.413)	(1.063)	(1.241)
Sued Period	-0.011	0.056**	0.014
	(-0.398)	(2.037)	(0.786)
Resolution Period	0.030	0.026	0.034**
	(1.295)	(1.296)	(2.506)
*Sued Period*Settled*	0.022	-0.009	0.000
	(0.752)	(-0.317)	(0.008)
*Resolution Period*Settled*	0.122***	-0.005	0.064**
	(3.139)	(-0.135)	(2.377)
Fixed Effects	Industry-Year	Industry-Year	Industry-Year
Cluster std. errors	Firm	Firm	Firm
Controls	Yes	Yes	Yes
N	9,845	9,845	9,845
Adjusted R-Squared	0.080	0.129	0.071
*Sued Period*Settled = Resolution Period*Settled* (*p*-value)	0.008	0.917	0.0254

Panel B	***N. Words***	***Immaterial Indicator***	***Inestimable Indicator***	***Defensive Indicator***
Variables	(1)	(2)	(3)	(4)
Settled	0.004***	-0.036	0.136***	0.014
	(4.177)	(-1.388)	(4.862)	(0.646)
Sued Period	0.003***	0.001	0.125***	-0.022
	(3.589)	(0.035)	(3.800)	(-0.811)
Resolution Period	0.002**	-0.026	0.053**	0.027
	(2.550)	(-0.919)	(2.302)	(1.160)
*Sued Period*Settled*	-0.001	-0.023	-0.087**	0.017
	(-1.007)	(-0.680)	(-2.435)	(0.600)
*Resolution Period*Settled*	-0.000	-0.115***	-0.204***	0.122***
	(-0.026)	(-2.848)	(-5.037)	(3.213)
Fixed Effects	Industry-Year	Industry-Year	Industry-Year	Industry-Year
Cluster std. errors	Firm	Firm	Firm	Firm
Controls	Yes	Yes	Yes	Yes
N	9,845	9,845	9,845	9,845
Adjusted R-Squared	0.123	0.051	0.044	0.085
*Sued Period*Settled = Resolution Period*Settled* (*p*-value)	0.332	0.024	0.007	0.005

This table presents results of regressions of measures of litigation-related contingency disclosure on indicators for events related to corporate lawsuits. In particular, we examine whether the contingency-related disclosure is different for lawsuits that ended in settlement (*Settled*) versus those that were dismissed by the court. The primary independent variables of interest are the interactions between *Sued Period, Resolution Period* and *Settled*, as well as the *F*-test for coefficient equality between the coefficients. Appendix 1 provides definitions for all variables. The model includes multi-dimensional fixed effects for industry-year in certain estimations, where industry definitions are based on the Fama-French 17 definitions and year is based on fiscal year. T-statistics based on firm-clustered standard errors are shown in parentheses. All continuous variables are winsorized at the 1st and 99th percentiles.

Table 5 – Contingent Liabilities Disclosure around Lawsuit Events: Dismissal Petition Denied

Panel A	***Estimated Loss Indicator***	***Claim Indicator***	***Insurance Indicator***
Variables	(1)	(2)	(3)
Pre-Denial	0.009	-0.006	0.005
	(0.233)	(-0.153)	(0.178)
Post-Denial	0.092	-0.058	0.044
	(1.517)	(-1.305)	(1.023)
Resolution Period	0.169***	-0.006	0.108**
	(3.357)	(-0.132)	(2.586)
Fixed Effects	Industry-Year	Industry-Year	Industry-Year
Cluster std. errors	Firm	Firm	Firm
N	1,566	1,566	1,566
Controls	Yes	Yes	Yes
Adjusted R-Squared	0.052	0.146	0.013
Pre-Denial = *Post-Denial* (*p*-value)	0.178	0.279	0.364

Panel B	***N. Words***	***Immaterial Indicator***	***Inestimable Indicator***	***Defensive Indicator***
Variables	(1)	(2)	(3)	(4)
Pre-Denial	0.004***	-0.086*	0.155***	0.017
	(3.215)	(-1.850)	(3.116)	(0.462)
Post-Denial	0.005***	-0.091	0.005	0.073
	(3.051)	(-1.410)	(0.090)	(1.225)
Resolution Period	0.005***	-0.167***	-0.092*	0.139***
	(3.235)	(-3.464)	(-1.806)	(2.919)
Fixed Effects	Industry-Year	Industry-Year	Industry-Year	Industry-Year
Cluster std. errors	Firm	Firm	Firm	Firm
N	1,566	1,566	1,566	1,566
Controls	Yes	Yes	Yes	Yes
Adjusted R-Squared	0.150	0.029	0.041	0.060
Pre-Denial = *Post-Denial* (*p*-value)	0.899	0.944	0.00768	0.354

This table presents results of regressions of measures of litigation-related contingency disclosure on indicators for events related to securities class-action lawsuits. In particular, we examine whether the contingency-related disclosure is different for settled lawsuits before the motion to dismiss a lawsuit has been denied compared to after it has been denied. The primary independent variables of interest are: *Pre-Denial, Post-Denial,* and *Resolution Period*, as well as the *F*-test for coefficient equality between the coefficients. Appendix 1 provides definitions for all variables. The model includes multi-dimensional fixed effects for industry-year in certain estimations, where industry definitions are based on the Fama-French 17 definitions and year is based on fiscal year. T-statistics based on firm-clustered standard errors are shown in parentheses. All continuous variables are winsorized at the 1st and 99th percentiles. In this table, the sample is limited to securities class-action lawsuits, for which we were able to hand-collect the date on which the motion to dismiss was denied by the court.

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Table 6 – Predicting Lawsuit Outcomes with Contingent Liabilities Disclosure

Panel A	***Settled***	***Settled***	***Settled***
Variables	(1)	(2)	(3)
Estimated Loss Indicator	0.077*		
	(1.834)		
Claim Indicator		-0.029	
		(-0.736)	
Insurance Indicator			0.145**
			(2.584)
Filing Date Return	-0.299**	-0.300**	-0.300**
	(-2.486)	(-2.507)	(-2.483)
Litigation Risk	0.000*	0.000**	0.000**
	(1.895)	(2.260)	(2.151)
BTM	-0.002	-0.002	-0.002
	(-0.549)	(-0.737)	(-0.581)
Leverage	0.010	0.025	0.016
	(0.105)	(0.257)	(0.172)
ROA	0.020	0.022	0.026
	(0.223)	(0.231)	(0.279)
Market Cap	-0.013	-0.012	-0.012
	(-1.374)	(-1.202)	(-1.234)
Fixed Effects	Industry-Year	Industry-Year	Industry-Year
Cluster std. errors	Firm	Firm	Firm
N	925	925	925
Adjusted R-Squared	0.090	0.086	0.093

Panel B	***Settled***	***Settled***	***Settled***	***Settled***
Variables	(1)	(2)	(3)	(4)
N. Words	2.094			
	(1.524)			
Immaterial Indicator		-0.078**		
		(-2.117)		
Inestimable Indicator			-0.049	
			(-1.290)	
Defensive Indicator				0.076*
				(1.782)
Filing Date Return	-0.299**	-0.291**	-0.296**	-0.300**
	(-2.510)	(-2.437)	(-2.463)	(-2.494)
Litigation Risk	0.000**	0.000*	0.000**	0.000*
	(2.299)	(1.958)	(2.092)	(1.890)
BTM	-0.002	-0.002	-0.002	-0.002
	(-0.629)	(-0.592)	(-0.545)	(-0.555)
Leverage	0.015	0.015	0.008	0.007
	(0.153)	(0.155)	(0.087)	(0.078)
ROA	0.016	0.037	0.029	0.019
	(0.167)	(0.403)	(0.311)	(0.204)
Market Cap	-0.014	-0.013	-0.013	-0.013
	(-1.442)	(-1.366)	(-1.345)	(-1.346)
Fixed Effects	Industry-Year	Industry-Year	Industry-Year	Industry-Year
Cluster std. errors	Firm	Firm	Firm	Firm
N	925	925	925	925
Adjusted R-Squared	0.088	0.091	0.087	0.090

This table presents results of OLS regressions to determine whether the outcome of the corporate lawsuit (*Settled*) is predicted by prior legal contingency disclosure. The primary independent variables of interest are contingency disclosure scraped from the firm's 10-K each period. Appendix 1 provides definitions for all variables. The model includes multi-dimensional fixed effects for industry-year in certain estimations, where industry definitions are based on the Fama-French 17 definitions and year is based on fiscal year. It also includes all previous controls, and filing date returns. T-statistics based on firm-clustered standard errors are shown in parentheses. All continuous variables are winsorized at the 1st and 99th percentiles. The sample for this test includes firm-year observations that occurred during the last 10-K before settlement, amounting to 925 firm-years.

Table 7 – Predicting Settlement Amounts with Contingent Liabilities Disclosure

Dep Var =	***Settlement Amount***	***Settlement Amount***	***Settlement Amount***
Variables	(1)	(2)	(3)
Estimated Loss Indicator	1.228*		
	(1.833)		
Claim Indicator		-0.379	
		(-0.579)	
Insurance Indicator			2.114**
			(2.294)
Filing Date Return	-6.798***	-6.814***	-6.811***
	(-3.473)	(-3.480)	(-3.456)
Litigation Risk	0.007**	0.008**	0.007**
	(2.065)	(2.277)	(2.106)
BTM	-0.069*	-0.078*	-0.071*
	(-1.735)	(-1.898)	(-1.758)
Leverage	0.733	0.945	0.835
	(0.491)	(0.619)	(0.557)
ROA	-0.493	-0.463	-0.406
	(-0.360)	(-0.342)	(-0.301)
Market Cap	-0.105	-0.079	-0.082
	(-0.682)	(-0.513)	(-0.537)
Fixed Effects	Industry-Year	Industry-Year	Industry-Year
Cluster std. errors	Firm	Firm	Firm
N	925	925	925
Adjusted R-Squared	0.120	0.115	0.121

Dep Var =	***Settlement Amount***	***Settlement Amount***	***Settlement Amount***	***Settlement Amount***
Variables	(1)	(2)	(3)	(4)
N. Words	23.622			
	(1.091)			
Immaterial Indicator		-1.743***		
		(-2.956)		
Inestimable Indicator			-0.768	
			(-1.312)	
Defensive Indicator				1.186*
				(1.749)
Filing Date Return	-6.800***	-6.626***	-6.757***	-6.817***
	(-3.484)	(-3.426)	(-3.441)	(-3.482)
Litigation Risk	0.008**	0.007**	0.007**	0.007**
	(2.268)	(2.110)	(2.222)	(2.061)
BTM	-0.074*	-0.070*	-0.069*	-0.069*
	(-1.814)	(-1.743)	(-1.718)	(-1.745)
Leverage	0.818	0.794	0.708	0.695
	(0.545)	(0.530)	(0.472)	(0.464)
ROA	-0.525	-0.147	-0.360	-0.517
	(-0.386)	(-0.107)	(-0.264)	(-0.378)
Market Cap	-0.109	-0.111	-0.100	-0.100
	(-0.696)	(-0.734)	(-0.644)	(-0.652)
Fixed Effects	Industry-Year	Industry-Year	Industry-Year	Industry-Year
Cluster std. errors	Firm	Firm	Firm	Firm
N	925	925	925	925
Adjusted R-Squared	0.116	0.126	0.117	0.119

This table presents results of OLS regressions to determine whether the monetary outcome of the corporate lawsuit (*Settlement Amount*) is predicted by prior legal contingency disclosure. The primary independent variables of interest are contingency disclosure scraped from the firm's 10-K each period. Appendix 1 provides definitions for all variables. The model includes multi-dimensional fixed effects for industry-year in certain estimations, where industry definitions are based on the Fama-French 17 definitions and year is based on fiscal year. It also includes all previous controls, and filing date returns. T-statistics based on firm-clustered standard errors are shown in parentheses. All continuous variables are winsorized at the 1st and 99th percentiles. The sample for this test includes firm-year observations that occurred during the last 10-K before settlement, amounting to 925 firm-years.

Table 8 – Predicting Market Reactions to Lawsuit Resolution with Contingent Liabilities Disclosure

Dep Var =	***Resolution Date Return***	***Resolution Date Return***	***Resolution Date Return***
Variables	(1)	(2)	(3)
Estimated Loss Indicator	0.002		
	(0.842)		
Claim Indicator		0.002	
		(0.624)	
Insurance Indicator			0.001
			(0.253)
Filing Date Return	-0.009	-0.009	-0.009
	(-0.642)	(-0.632)	(-0.640)
Litigation Risk	0.000	0.000	0.000
	(1.511)	(1.484)	(1.608)
BTM	0.000	0.000	0.000
	(1.191)	(1.190)	(1.166)
Leverage	0.010	0.010	0.011
	(1.297)	(1.271)	(1.328)
ROA	-0.011	-0.010	-0.010
	(-1.352)	(-1.300)	(-1.334)
Market Cap	-0.005***	-0.005***	-0.005***
	(-4.692)	(-4.674)	(-4.658)
Fixed Effects	Industry-Year	Industry-Year	Industry-Year
Cluster std. errors	Firm	Firm	Firm
N	913	913	913
Adjusted R-Squared	0.097	0.097	0.097

Dep Var =	***Resolution Date Return***	***Resolution Date Return***	***Resolution Date Return***	***Resolution Date Return***
Variables	(1)	(2)	(3)	(4)
N. Words	0.064			
	(0.787)			
Immaterial Indicator		-0.000		
		(-0.120)		
Inestimable Indicator			0.002	
			(0.542)	
Defensive Indicator				0.003
				(0.845)
Filing Date Return	-0.009	-0.009	-0.009	-0.009
	(-0.640)	(-0.639)	(-0.647)	(-0.646)
Litigation Risk	0.000*	0.000	0.000*	0.000
	(1.678)	(1.626)	(1.652)	(1.505)
BTM	0.000	0.000	0.000	0.000
	(1.174)	(1.166)	(1.128)	(1.190)
Leverage	0.011	0.011	0.011	0.010
	(1.319)	(1.329)	(1.362)	(1.282)
ROA	-0.011	-0.010	-0.011	-0.011
	(-1.372)	(-1.329)	(-1.347)	(-1.358)
Market Cap	-0.005***	-0.005***	-0.005***	-0.005***
	(-4.721)	(-4.648)	(-4.598)	(-4.686)
Fixed Effects	Industry-Year	Industry-Year	Industry-Year	Industry-Year
Cluster std. errors	Firm	Firm	Firm	Firm
N	913	913	913	913
Adjusted R-Squared	0.097	0.097	0.097	0.098

This table presents results of OLS regressions to determine whether the market reaction to the corporate lawsuit resolution (*Resolution Date Return*) is predicted by prior legal contingency disclosure. The primary independent variables of interest are contingency disclosure scraped from the firm's 10-K each period. Appendix 1 provides definitions for all variables. The model includes multi-dimensional fixed effects for industry-year in certain estimations, where industry definitions are based on the Fama-French 17 definitions and year is based on fiscal year. It also includes all previous controls, and filing date returns. T-statistics based on firm-clustered standard errors are shown in parentheses. All continuous variables are winsorized at the 1st and 99th percentiles. The sample for this test includes firm-year observations that occurred during the last 10-K before settlement, amounting to 925 firm-years.

Table 9 – Predicting Lawsuit Outcomes: Principle-Components of Contingent Liabilities Disclosure

Dep Var =	***Settled***	***Settlement Amount***	***Settlement Day Return***
Variables	(1)	(2)	(3)
PCA	0.023**	0.387**	0.000
	(2.194)	(2.320)	(0.528)
Filing Date Return	-0.296**	-6.750***	-0.009
	(-2.460)	(-3.450)	(-0.637)
Litigation Risk	0.000*	0.007**	0.000
	(1.884)	(2.051)	(1.564)
BTM	-0.001	-0.066	0.000
	(-0.483)	(-1.646)	(1.185)
Leverage	0.004	0.630	0.010
	(0.046)	(0.422)	(1.296)
ROA	0.026	-0.403	-0.010
	(0.284)	(-0.294)	(-1.330)
Market Cap	-0.014	-0.116	-0.005***
	(-1.433)	(-0.755)	(-4.672)
Fixed Effects	Industry-Year	Industry-Year	Industry-Year
Cluster std. errors	Firm	Firm	Firm
N	925	925	913
Adjusted R-Squared	0.091	0.122	0.097

This table presents results of several regressions to determine whether outcomes are predicted by contingency related disclosure. The primary independent variable of interest is the principle-component of the following legal contingency disclosures scraped from the firm's 10-K each period: *Loss Contingency Indicator*, *Claim Indicator*, *Insurance Indicator*, *N. Words*, *Immaterial Indicator*, *Inestimable Indicator*, and *Defensive Indicator*. Appendix 1 provides definitions for all variables. The model includes multi-dimensional fixed effects for industry-year in certain estimations, where industry definitions are based on the Fama-French 17 definitions and year is based on fiscal year. It also includes all previous controls, and filing date returns. T-statistics based on firm-clustered standard errors are shown in parentheses. All continuous variables are winsorized at the 1st and 99th percentiles. The sample for this test includes firm-year observations that occurred during the last 10-K before settlement, amounting to 925 firm-years.