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THE REPORTING OF CONTINGENT LEGAL LIABILITIES: EMPLOYMENT DISCRIMINATION LAWSUITS

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Abstract

The reporting of contingent legal liabilities is an area where financial reporting standards conflict with legal strategy and policy. There are legal costs associated with the disclosure of pending litigation that make firms reluctant to fully disclose their assessment of legal contingencies. I investigate pending-litigation disclosures in 10-Ks for evidence that current contingent legal liability disclosures convey contingency valuation information to investors or whether the legal environment drives firms to provide only formulaic disclosures with little or no useful information. I find that firms rarely disclose an estimate (either point or range) of the magnitude of the potential loss from litigation. However, I find that textual statements (or the lack thereof) regarding the accrual status of the contingency, the potential materiality of the loss, and the firm's willingness to settle can all be used to form a meaningful prediction of the likelihood of loss in a given suit. I also find that my predicted probability of loss derived from the financial statements is weakly correlated with the market's expected probability of loss, which is consistent with the market using the SFAS 5 disclosures or similar information. These results suggest that the observed compromise between reporting requirements and legal incentives does contain some information relevant and useful for evaluating the loss contingency. This evidence on the strengths and weaknesses of current practice provides investors and standard-setters with a necessary baseline for assessing the potential impact of upcoming revisions to SFAS 5.

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1 Introduction

The threat of litigation pervades nearly every aspect of the contemporary U.S. business environment, and the magnitude of potential losses from litigation can be substantial.[1] Even ignoring the indirect costs associated with lawsuits, litigation can represent a multi-million- or multi-billion-dollar charge against the firm. As the likelihood and magnitude of a potential loss increases, current shareholders become increasingly concerned with the potential impact the legal contingency will have on firm value and would benefit from clear information about legal contingencies in firms' financial statements. In this study, I investigate whether current contingent legal liability disclosures provide useful contingency valuation information to investors or if the legal environment drives firms to provide formulaic disclosures with little or no useful information.

Contingent legal liability disclosure is an area where financial reporting standards conflict with legal policy and strategy, and the legal concerns associated with informative disclosure of pending litigation make firms unwilling to fully comply with the SFAS 5 reporting requirements. Lawyers' responses to audit inquiry letters are often outside of attorney-client privilege and thus discoverable (along with related audit workpapers) by opposing counsel. The revelation of internal litigation assessments to a plaintiff's attorney could compromise legal strategy by providing previously unknown facts or evidence to the opposing counsel. The revealed estimate of loss or recognition of the liability

[1] For example, in a recent survey of 422 senior corporate lawyers (Fulbright & Jaworski, 2006), 89% of U.S. respondents indicated that their firm had faced at least one lawsuit within the past year, and 23% indicated that their firm had faced more than 50 new lawsuits during the past year. Forty percent indicated that they had faced at least one lawsuit in which $20 million or more was at issue, and one-third had at least one class action pending.

could also be treated as an implicit admission of culpability, which increases the odds of an unfavorable outcome, encourages follow-on suits, and raises the floor for potential settlement amounts. Given these potential costs, both firms and the counsel obligated to protect them are generally very reluctant to disclose all of the specific contingency valuation information suggested by SFAS 5.

Prior research on compliance with SFAS 5 finds that firms fail to provide advance warning of nontrivial losses from litigation. However, even among firms that do disclose in-process litigation in a timely manner, there is no evidence that current contingent legal liability disclosures offer more than perfunctory compliance with SFAS 5. Investors searching firms' public filings usually find reference to potentially material pending litigation, but it is not clear that firms provide enough information to allow statement users to evaluate the loss contingency. Although it is common for firms to disclose that they "fully deny" or will "vigorously defend" all allegations, it is much less likely for investors to find a clear statement on the two most pertinent factors: the probability or the magnitude of the potential loss.

Using a sample of 110 firms that disclose now-resolved employee discrimination lawsuits in 10-Ks filed between 1996 and 2000, I test whether the components of these disclosures convey information about the outcome of the litigation. Consistent with research in earlier periods that finds substantial noncompliance with SFAS 5, I find that only 10 of 110 firms disclose an estimate (point, range, or aggregate) of the magnitude of the potential loss from litigation. However, I do find that certain textual elements of the disclosures are related to litigation outcomes. More specifically, I find that statements (or the lack thereof) regarding the accrual status of the contingency, the potential materiality

of the loss, and the firm's willingness to settle can all be used to form a meaningful prediction of the likelihood of loss in a given suit, whereas I find no evidence that other components of these disclosures provide predictive information.[2] I also find that my predicted probability of loss derived from the financial statements is weakly correlated with the market's expected probability of loss, which is consistent with the market using the SFAS 5 disclosures or similar information. These results suggest that the costs associated with truthful disclosure of legal contingencies deter firms from fully disclosing contingency information, but that the observed compromise between reporting requirements under GAAP and legal incentives does contain some information relevant and useful for evaluating the loss contingency.

An analysis of the current reporting for legal contingencies is particularly timely as the FASB has recently expressed its intent to reconsider SFAS 5 and accounting for contingencies. The FASB notes that financial statement users continue to express concerns that the disclosure criteria in SFAS 5 are "inadequate or ineffective" (FASB, 2007, p. 1) and acknowledge that several recent standards deviate from the recognition and measurement criteria of SFAS 5. To address these concerns, the FASB has decided to add a multi-phased project on contingencies to their agenda. In the short-term, the first phase of the project will focus on inconsistencies between SFAS 5 and the proposed revision (FASB, 2005) to SFAS 141 (2001), and a second phase will consider expanding the disclosure requirements of SFAS 5. A long-term third phase will comprehensively reconsider accounting models for contingencies. This long-term phase will almost cer-

[2] Examples of contingent legal liability disclosures are provided in the Appendix, and examples of each type of textual component are provided in Table 1.

tainly consider a move towards convergence with international standards or a shift towards a more fair value approach to the balance sheet, either of which would mean substantial changes to the standards for reporting contingencies.[3] Standard-setters need an understanding of strengths and weaknesses of actual current practice to analyze the impact of potential changes and to avoid repeating some of the problems associated with the existing standard.

2 Accounting for Contingent Legal Liabilities

SFAS No. 5 *Accounting for Contingencies* (FASB, 1975) is the primary standard governing the reporting of potential losses from pending litigation, partially superseding ARB 50 *Contingencies* (AICPA, 1958).[4] SFAS 5 divides loss contingencies into three groups based on the likelihood that the loss will be realized: probable, reasonably possible, and remote. SFAS 5 dictates that material loss contingencies that are both probable and reasonably estimable must be accrued on the balance sheet. As clarified in FIN 14 (FASB, 1976), firms should accrue the best estimate of the potential loss if one can be reasonably obtained. If only a range of potential losses is estimable and no point value is better than another, firms should accrue the minimum of the range and disclose the potential for additional loss exposure up to the maximum of the range.

[3] At present, the international standard (IAS 37) for reporting contingent liabilities is similar to SFAS 5. However, the IASB is in the process of revising this standard and the current exposure draft deviates considerably from SFAS 5 by proposing an expected value approach that completely shifts the probability assessment from the recognition decision to the valuation decision.

[4] Reg S-K §229.103 also requires management to briefly describe material pending litigation that is not incidental to the ordinary course of business. A review of 10-K filings suggests that it is common for public firms to use the same disclosure to satisfy both SFAS 5 and Reg S-K §229.103 either by duplicating the entire text of the discussion of pending litigation in both Item 3 "Legal Proceedings" and a footnote or by omitting the information entirely in one location and just referring the user to the alternate section of the document.

Loss contingencies that are deemed probable or reasonably possible must also be disclosed, even if an inability to estimate the potential losses prevents accrual. Consistent with ARB 50, SFAS 5 specifies that this disclosure should indicate the nature of the loss contingency and provide a point or range estimate of the amount of loss. If the potential loss cannot be estimated, a statement to that effect is required.[5] Thus loss contingencies that are reasonably possible or probable must be disclosed, and those which are probable and estimable must be accrued. Contingencies where the chance of loss is judged to be remote are generally not required to be disclosed or accrued.

2.1 Defining "Probable," "Reasonably Possible," and "Remote"

SFAS 5 offers limited guidance on how the terms "probable," "reasonably possible," and "remote" should be interpreted. The standard defines a "probable" event as one likely to occur and a "remote" event as one with a slight chance of occurring, but the words "likely" and "slight" are not any more precise than "probable" and "remote." The "reasonably possible" range is the least-defined and simply defaults to something more than remote but less than probable. The lack of quantitative thresholds and the ill-defined qualitative terms allow for considerable discretion in the application of SFAS 5 and create the potential for expectation gaps among shareholders and auditors.

Several experiments investigate how auditors interpret the terminology of SFAS 5 and attempt to solicit numerical interpretations of the relevant probability thresholds that trigger disclosure or accrual of contingencies. These studies suggest there is considerable

[5] SAS 58 (1988) previously required auditors to reference probable but inestimable contingencies in the audit report and to consider an explanatory paragraph for estimable probable or reasonably possible contingent losses, but SAS 79 (1996) eliminated this requirement.

variation in subjects' interpretations of the SFAS 5 terminology, with mean estimates of the "remote" to "reasonably possible" threshold ranging from a 15% (Reimers, 1992) to 40% (Schultz and Reckers, 1981) probability of loss and mean estimates of the "reasonably possible" to "probable" threshold ranging from 67% (Reimers, 1992) to 75% (Brackner, 1985). [6]

If auditors within the same firm disagree on the SFAS 5 terminology, it is not surprising that subjects with different backgrounds have also been found to have different interpretations of the probability expressions. For example, Reckers and Stagliano (1979) find significant differences in the numerical interpretation of "probable" across large audit firm employees, small audit firm employees, and corporate accountants. Further decreasing the likelihood of SFAS 5 being applied consistently across firms, additional studies (e.g., Lewis (1980), Schultz and Reckers (1981), Raghunandan et al. (1991), Amer et al. (1995), and Hackenbrack and Nelson (1996)) also note that experimental participants' interpretation of SFAS 5 thresholds vary with aspects of the firm and the contingency being evaluated. Research by Brackner (1984), Nelson and Kinney (1997), and Aharony and Dotan (2004) also suggests that managers, lawyers, and statement users translate the terms of SFAS 5 differently than auditors. Overall, the results of prior experimental work suggest that statement preparers and users form different evaluations of contingencies against different thresholds for different situations.

[6] The well-above 50% lower bound of "probable" is inconsistent with IAS 37 (1998), the international counterpart to SFAS 5, which defines "probable" as "more likely than not" and is generally interpreted at just over 50% likelihood. See Jiambalvo and Wilner (1985), Harrison and Tomassini (1989), and Raghunandan et al. (1991) for additional threshold estimates within the ranges described above and Chesley (1979) and Amer et al. (1994) for mean interpretations (rather than thresholds) of probability language.

Consistent with a major criticism of SFAS 5, this uncertainty in the appropriate application of SFAS 5 for a given set of facts could severely hamper the comparability of disclosure about the probability of loss across firms. However, even if SFAS 5 were revised to be a "bright-line" standard with explicit thresholds, uncertainty would still remain around what estimated probability of loss to compare to the defined thresholds as auditors are generally not experts at evaluating contingent legal liabilities and must rely on information from the firm's management and legal counsel, who have incentives and constraints of their own.

2.2 *Lawyers' Responses to Auditor Inquiries*

As part of the preparation of financial statements, management generally provides the auditors with a list of all (potentially material) pending, threatened, and unasserted legal claims to be used to determine the necessary SFAS 5 disclosures and accruals. The auditor then writes to legal counsel engaged during the period and requests the following information regarding all legal contingencies identified by management: the nature of the litigation, the progress of the case to date, how management intends to respond to the claim, an evaluation of the likelihood of an unfavorable outcome, an estimate of the amount or range of potential losses, and a statement regarding the completeness of the claims list. As acknowledged in SAS 12 (1976) and discussed in depth by Carmichael (1973) and Harrison and Pearson (1989), lawyers' responses to this inquiry are generally the auditor's only means of corroborating management's statements concerning litigation, claims, and assessments. Unfortunately, the auditor generally receives limited information in the response letter.

Lawyers' responses to auditor inquiries are guided by an American Bar Association (ABA) Statement of Policy (1975) that does not align well with SFAS 5. The ABA policy statement suggests that lawyers refrain from expressing judgment on the outcome except in rare cases where the client's prospects of success or prospects of failure are "slight" or "extremely doubtful." Given this criterion, the ABA anticipates that for most cases counsel's response should generally not include an assessment of expected outcome. Similarly, the ABA Statement of Policy advises counsel to provide an estimate of the amount or range of loss related to an unfavorable outcome only if the probability of inaccuracy in the estimate is slight. Thus, in most cases, the lawyer's response to the auditors' inquiry will not include a magnitude estimate. Although application of SFAS 5 requires an assessment of the likelihood of an unfavorable outcome and of the potential loss amount, auditors often receive only "unable to express an opinion" disclaimers from legal counsel.

There is considerable uncertainty involved in the legal process and many types of liability are inherently difficult to estimate accurately. However, as management and legal counsel surely form expectations when making settlement and defense strategy decisions, it is unlikely that all "unable to express an opinion" responses truly reflect a complete lack of opinion. As suggested by Quinlivan (1991), counsel's nondisclosure is partly self-protecting as lawyers want to avoid issuing statements that could appear overconfident or erroneous ex post. The ABA policy statement, however, asserts that it is primarily governed by the desire and obligation of the lawyer to protect the client as much as possible; counsel is not more forthcoming to the auditor because it could actually be detrimental to the client to do so.

Information about potential claims and pending litigation discussed between the firm and legal counsel is protected by attorney-client privilege. However, disclosure of such privileged information to a third-party (including the auditor) can constitute a waiver of privilege on that communication or even on that entire subject matter. Textbook authors Barrett (2002) and Herwitz and Barrett (2006) advise prospective plaintiff's attorneys to use the discovery process to obtain responses to the audit inquiry letter and audit workpapers relating to a litigation reserve whenever possible. Although there have been various attempts to extend attorney-client privilege to responses to audit inquiry letters or to argue an accountant-client privilege since SFAS 5 was implemented, the majority of cases conclude that information compiled by auditors or communicated to auditors is open to discovery by claimants.[7] Consequently, Krogstad et al. (2002) find that defense attorneys cite the potential waiver of attorney-client privilege as the major inhibitor of their responses to auditors' inquiries.

Clearly, the revelation of internal litigation assessments to a plaintiff's attorney could compromise legal strategy by providing previously unknown facts or evidence to the opposing counsel. As the ABA also warns, the revealed estimate of loss or of the litigation reserve could also be treated as an implicit admission of culpability.[8] Such an admission could increase the odds of an unfavorable outcome, encourage follow-on suits, or raise the floor for a potential settlement amounts. This suggests that the indirect

[7] See Hodel and Burke (1991), Shalit (1994), Rothschild and McKenna (1997), and Sharp and Stanger (2000) for case examples.

[8] In a bad faith insurance dispute, the existence of a claim reserve can be discoverable but is generally inadmissable as evidence of coverage (see Sukel and Pipkin (1998) for a discussion of judicial opinions on this matter). However, in other types of legal disputes the existence of a loss reserve or loss accrual may be both discoverable and admissable.

costs of complete compliance with SFAS 5 could be quite high.[9] Although the FASB is considering incorporating a prejudicial exemption clause in their revision to SFAS 5, omitting disclosure for legal concerns is not permitted under the current standard.

Firms benefit from noncompliance with SFAS 5 by avoiding the legal costs described above, and the risks associated with imperfect compliance appear to be fairly low in this setting. A search of SEC comment letters now available on EDGAR reveals only a few instances where the SEC requested that firms clarify their contingent legal liability reporting. Furthermore, assuming the existence of pending lawsuits against the firm is disclosed even minimally, the firm faces little risk of securities fraud lawsuits as the ambiguity of SFAS 5 and the uncertainty surrounding the legal process would make it very difficult to establish the strong inference of scienter required to pursue a shareholder class action. Weighing the potential costs of complete compliance with SFAS 5 and the low costs of noncompliance, it is plausible that firms choose a level of disclosure that provides no information on the expected value of the contingency.

2.3 Evidence on SFAS 5 Compliance

Prior research investigates firms' SFAS 5 disclosures in the early years after the standard's release. Dennis and Keith (1981), for example, examine the footnotes of 198 NYSE firms using financial statements from 1977 and 1978 and find that a large number

[9] To the extent that the FIN 48 (2006) tax contingency debate revolves around the possibility of increased tax contingency disclosure leading to increased tax payments, there is some similarity between the SFAS 5 and FIN 48 settings. However, as discussed in Blouin et al. (2007, 2008) and Mills et al. (2007), the primary concern with FIN 48 is attracting additional IRS attention with prominent disclosure of large tax reserves; the protected status of underlying working papers, the potential for follow-on suits, and the creation of a settlement floor are not major concerns in the FIN 48 setting.

of firms fail to clearly indicate the nature of a given case, the current status of the case, or an inability to estimate the loss when no estimate is given, all of which are disclosures required by SFAS 5. Similarly, Fesler and Hagler (1989) compare litigation disclosures during 1982-1983 with eventual case outcomes. They judge 43% of their sample to have provided no or insufficient warning regarding the legal liability and conclude that there is still a lack of consistency and compliance in this area.

Although this research on earlier periods expresses dissatisfaction with firms' application of SFAS 5, much has changed in the overall reporting environment in the intervening decades since SFAS 5 was first implemented. The quantity and quality of disclosure on many topics, including other types of contingencies, has increased dramatically, and increased widespread demand for reporting transparency alters the costs and benefits of the firm's disclosure decision. Earlier evidence on SFAS 5 disclosures does not necessarily extend to current practice, and the more contemporary reporting of contingent legal liabilities is undocumented. Prior work also focuses on what is missing from these disclosures rather than evaluating the items actually included. This study analyzes what is disclosed about a particular legal contingency and relates the disclosures to the litigation outcome.

3 Research Design

The two primary pieces of information management could provide about a contingency valuation are the probability of realizing a loss and the estimated magnitude of that loss. As discussed above, prior literature documents that range or point estimates of

the magnitude of the potential loss are rarely disclosed, and this trend continues in my sample. Although both a magnitude estimate and a probability estimate are necessary to calculate the expected value of the contingency, very few observations provide any magnitude information. I thus focus the bulk of my analyses on how firms' disclosures reflect the probability of loss.

3.1 Disclosures and Case Outcomes

Predicting the outcome of even the most straightforward claim against a corporation can be difficult considering that even when precedent exists, differences in the case facts, trial location, and the identities of the plaintiff, judge, lawyers, and jurors all introduce uncertainty. However, management and counsel certainly make some evaluations about prospective trial outcomes when considering settlement options or defense strategies and should generally be in a position to provide a better-than-random assessment of the likelihood of the loss. The question is whether the legal concerns associated with truthful disclosures in this setting make managers reluctant to reveal their true opinions regarding the probability of loss.

I test whether the 10-K disclosure of a contingent legal liability can be used to form predictions regarding the case outcome (win/lose) by using the following logistic regression to evaluate which components of the disclosure are related to the outcome:

$$Loss = f(\alpha + \beta_1 Accrual + \beta_2 Material + \beta_3 Remote + \beta_4 Defense + \beta_5 SettleRef + \epsilon) \qquad (1)$$

The following variable definitions are summarized in Table 2. I measure the dependent variable *Loss* as a dichotomous variable indicating whether the firm did or did

not have a realized nontrivial loss in a particular legal case. To determine *Loss*, I evaluate the distribution of the loss amount scaled by prior period's total assets across my sample firms. *Loss* equals one for relative loss amounts above the median and equals zero for relative loss amounts below the median, where the dollar magnitude of loss is measured as the total amount payable (damages minus applicable insurance) by the defendant firm as of the date of the initial case resolution.[10] For settlements and dismissals, this initial resolution is generally final. For those cases proceeding to trial, initial verdicts are used, but sensitivity analyses consider subsequent appeals and post-verdict settlements. All independent variables reflect the presence or absence of specific components in the contingent legal liability disclosure in the last 10-K before the case is resolved.[11]

Accrual is an indicator variable set equal to one if the disclosure suggests that the firm has accrued a litigation liability and is set to zero otherwise. Firms that explicitly disclose the contingency accrual or provide an aggregate accrual number for a set of cases including the sample case are assigned *Accrual* = 1. Firms stating they have accrued as necessary or or indicating they have passed "probable" threshold but are unable to estimate the loss are also coded *Accrual* = 1. Firms that explicitly indicate they have not accrued any amount or who make no comment on the accrual status at all are coded *Accrual* = 0. If firms' references to accrued status are unreliable or not meaningfully

[10] Although not as straightforward as a pure win/loss indicator, this measure should result in trivial losses being appropriately classified as "wins" without having to subjectively distinguish between trivial and nontrivial losses. See Section 5.3 for a discussion of alternate constructs.

[11] The most recent disclosure before the case resolution provides the most powerful opportunity to test the informativeness of pending-litigation disclosures as management has a greater ability to estimate the case outcome as the resolution approaches. However, as discussed in Section 5.3, my investigation reveals that there is minimal change in these disclosures over the life of the suit, so an earlier 10-K would offer comparable information.

different from the absence of such disclosures, there should be no relation between *Accrual* and the likelihood of loss. A lack of association between *Accrual* and the likelihood of loss would be consistent with firms' concerns about the discovery of privileged material driving them to avoid a reference to the accrual in the disclosure. If, however, firms adhere to the regulatory requirements (at least above some probability threshold), then the disclosure of the existence of an accrual reflects a higher probability of loss assessment, and I expect *Accrual* to be positively related to the likelihood of loss.

Similarly, *Material* is set equal to one if the firm indicates there is a chance that the lawsuit will have a material impact on either the firm's financial performance or financial condition and is set equal to zero for those cases where management makes no comment on potential materiality or indicates that the outcome is expected to be immaterial. [12] To the extent that materiality warnings can suggest the order of magnitude of the estimated loss, legal concerns about increasing settlement floors or attracting follow-on suits provides an incentive for firms to avoid informative materiality statements. If firms' materiality warnings are unreliable or not meaningfully different from the absence of such disclosures, there should be no relation between *Material* and the likelihood of loss. As firms are only required to disclose material contingencies, it is possible that all disclosed cases exceed the materiality threshold regardless of whether the potential materiality is explicitly noted or not. If, however, concerns about shareholder litigation or regulatory action prompt the firm to provide more explicit warnings when the odds are

[12] Although SFAS 5 does not require firms to disclose contingencies truly expected to be immaterial, such disclosures are observed in practice. The "immaterial" assertions may not be credible, or they may be a public acknowledgment of a lawsuit that received abnormally high levels of media attention but that the firm truly believes is immaterial.

less favorable, then these warnings will reflect a higher probability of loss assessment. If reporting concerns dominate the increased legal risk of disclosure, I expect *Material* to be positively related to the likelihood of loss.

The variables *Remote* and *Defense* are also dichotomous variables based on textual statements made within the contingency footnote. Litigation disclosures in the 10-K often include qualitative statements regarding the case or management's defense (e.g., "We feel the plaintiff's case has no merit," "We believe we have strong arguments in this case," etc.). An AICPA interpretation of SAS 12 (see AU §9337) discusses to what extent auditors can infer the likelihood of loss from statements like these if received in the lawyer's response to the inquiry letter. The AICPA concludes that certain phrasings imply that the likelihood of loss is remote (e.g., "We feel the plaintiff's case has no merit," "We believe the action will not result in a liability," "We believe we can defend this action successfully," and similar statements). *Remote* is equal to one if the disclosure contains one of these statements that the AICPA has equated with a remote likelihood of loss and is equal to zero otherwise. As firms are not required to disclose contingencies where the probability of loss is truly remote, there is no reason to expect these statements to be reliable given that the case is being disclosed. However, if other factors drive these disclosures and these statements are used in a manner consistent with the AICPA interpretation, I expect *Remote* to be negatively related to the likelihood of loss.

Statements regarding the firm's legal defense (e.g., "We believe we have a strong defense in this case," "We believe we have strong arguments in this case," "We intend to defend these charges vigorously," etc.) are frequently observed in litigation disclosures and presumably are intended to convey some positive sentiment. The indicator variable

Defense is set equal to one for disclosures containing these assertions about the quality of the firm's defense. As such statements are not considered sufficiently clear under SAS 12, and the ABA statement explicitly notes that comments like these should not be viewed as expressing an opinion about the likelihood of success, the predictive ability of these statements is unclear.

Lastly, *SettleRef* is set equal to one if the firm explicitly indicates a willingness to settle (e.g., "Although we deny the allegations, we may agree to a settlement if we feel it is in the best interest of our shareholders") or discloses that settlement negotiations are scheduled or in-process. If not just part of a boilerplate disclosure, a discussion of a potential settlement implies an expectation of at least some level of payment. Legal anecdotes suggest that a premature reference to the possibility of settlement can damage the firm's legal position, so from the legal perspective a reference to a settlement is a clear concession of a higher probability of realizing a loss.[13] Financial reporting principles, in contrast, suggest that the potential for settlement should be disclosed whenever settlement is reasonably likely. Given the high settlement rate for litigation in this country, a large percentage of all disclosed cases are reasonably likely to settle and such a reference to a potential settlement would convey little information. Thus *SettleRef* is predicted to be positively related to the probability of realizing a loss if legal concerns outweigh the desire for more conservative, transparent disclosures.

The pending litigation disclosure in the 10-K often also provide factual information about the case including the plaintiff's identity, the complaint, the legal venue, and the

[13] For example, Sullivan (2007) cites Sherwin-Williams' steadfast refusal to even discuss the possibility of settlement as a key part of the firm's strategy in avoiding mass tort litigation over lead paint issues.

types of damages requested. These components are interesting descriptively but are verifiable public facts that do not reflect the private assessment of the defendant firm. Such items are excluded from this model as I focus on those discretionary components of the 10-K disclosure that could potentially reveal management's private assessment of the contingency, but some of these items are discussed in the sensitivity analyses in Section 5.3.

3.2 Disclosures and the Market Reaction to Case Resolution

Given the criticism of SFAS 5 and anecdotal assertions that the contingency disclosures are little more than a collection of boilerplate phrases, it is unclear to what extent the market uses these disclosures. Previous research (e.g., Gratto et al. (1990), Bhagat et al. (1994), Bhagat et al. (1998), Cox and Means (1999)) documents significant market reactions to some lawsuit judgments and settlements, which suggests that the market does not fully anticipate case resolutions. The fact that the market reaction to the resolution does not perfectly correspond to the realized payout amount suggests that the market forms some expectations that are incorporated into price prior to the actual resolution of the case. Although it is not possible to determine exactly what pieces of information the market actually considers when forming these expectations, I can assess whether the market's expectation of loss is correlated with the predictions that could be obtained using the financial statement disclosures.

Under the standard framework, the abnormal return at the resolution announcement represents the difference between the realized litigation loss and the expectation of that loss already incorporated by the market. I apply this conventional model to my

setting:

$$CAR = \alpha - \lambda Unexpected\ Loss + \epsilon$$
$$CAR = \alpha - \lambda(Actual\ Loss - Expected\ Loss) + \epsilon$$
$$CAR = \alpha - \lambda_A Actual\ Loss + \lambda_E Expected\ Loss + \epsilon$$
$$CAR = \alpha - \lambda_A Actual\ Loss + \lambda_E(Probability\ of\ Loss*Estimated\ Magnitude) + \epsilon$$

The expected loss is a function of the estimated probability of loss times the expected magnitude of the loss. I use the likelihood of loss that could be inferred from the financial statement disclosure (predicted probabilities of loss from Model 1) as my probability of loss measure, and total damages paid provide a value for actual loss.

I proxy for expected magnitude with the realized magnitude of damages paid. Although using the ex post magnitude to proxy for the market's estimated magnitude is not ideal, it is at least as good as other viable alternatives and should be reasonable if the market estimate is correct on average. The use of realized magnitude, however, is problematic for cases where the defendant is assessed no damages (e.g., the case is dismissed or returns a defense verdict), and I have no non-zero estimate of expected magnitude. To isolate the impact of these cases from my variable of interest, I propose a model that deviates slightly from the normal specification by adding an indicator variable (*Win*) set equal to one when the realized loss is zero and is set to zero for all other cases. The indicator variable (*Win*) is interacted with *ProbLoss* in a model of the following form:

$$\begin{aligned} CAR_{(-2,+2)} = \alpha + \beta_1 ProbLoss*Win + \beta_2 Magnitude + \beta_3 ProbLoss*Magnitude \\ + \beta_4 Settlement + \beta_5 ClassAction + \beta_6 Punitive + \epsilon \end{aligned} \tag{2}$$

The dependent variable (*CAR*) is measured as the cumulative abnormal return from two days prior to two days after the announcement of the resolution of the case via dismissal, settlement, summary judgment, or trial verdict. The abnormal return

is calculated using a standard market model estimated over the 255 trading days (approximately one year) ending at day -46 and using the CRSP value-weighted return as the market return.

Magnitude is measured as the (positive) damages paid scaled by the market value of equity at the date of the last 10-K, and *ProbLoss* is defined as the predicted probability of loss from Model 1.[14] The *Win* variable (as defined above) is interacted with *ProbLoss*, so β_1 only reflects those cases where the firm does *not* realize a loss. The term β_1*ProbLoss*Win* represents the expected loss in these cases with no realized loss, which implies that β_1 is a very rough estimate of the average expected magnitude for these cases that were won. As *Magnitude* is zero when the defendant wins the suit, the coefficient estimates for β_2 and β_3 reflect only those cases where the firm realizes some magnitude of loss.

The abnormal return at the resolution announcement represents the difference between the realized litigation loss and the expectation of that loss already incorporated by the market, so when *Magnitude* > 0 (and thus *Win* = 0), ignoring the control variables (*Settlement*, *ClassAction*, and *Punitive*), the term β_2*Magnitude* represents the realized loss and the term β_3*ProbLoss*Magnitude* represents the market's pre-announcement expectation of the loss. The coefficient β_3 captures the extent to which *ProbLoss* is related to the market's estimate of the probability of loss. A significantly positive estimate of β_3 suggests that the probability of loss that can be assessed from the financial statements aligns with the market's estimate of the likelihood of the loss, at least in cases where the

[14] As noted by Pagan (1984), Murphy and Topel (1985), and Gauger (1989) and summarized by Oxley and McAleer (1993), there are econometric concerns with using the predictions from Model 1 in Model 2 with essentially the same sample that suggest Model 2 results should be interpreted with caution. Since predicted probability is actually the desired construct in Model 2, the standard correction techniques do not clearly apply, so the results are presented unadjusted.

firm does realize a loss. Although I cannot comment on whether the market does actually use the financial statement information in Model 1, this result would suggest that the prediction formed from the financial statement disclosure is consistent with whatever information is incorporated in the market's expectation.

Several control variables (*Settlement*, *ClassAction*, and *Punitive*) are also included in Model 2. Prior research suggests that the market reaction differs for settlement announcements versus other outcomes, so *Settlement* is included and set equal to one for cases resolved with an out-of-court settlement. Indicators are included for purported class action status (*ClassAction* equals one for a class action suit and zero otherwise) and punitive damage requests (*Punitive* equals one if the plaintiff requests punitive damages and zero otherwise) as these characteristics are publicly available before the resolution and could impact the market's valuation of the contingency.

4 Sample

To examine contingent legal liability disclosures, I collect a sample of firms who identify themselves in their 10-K as defendants in pending employment discrimination litigation. I focus on employee discrimination lawsuits (e.g., age, gender, or race discrimination) as this type of lawsuit has several desirable sample characteristics. Unlike environmental claims, there are no specialized reporting requirements for this type of legal contingency, and employee claims are unlikely to be concentrated in only a few industries. Although employee lawsuit verdicts can have implications for the firm's future personnel procedures, these suits are less likely than patent or licensing disputes

to have a major impact on future lines of business that would add additional cash flow uncertainty for market participants.[15] Lastly, firms are much less likely to have insurance for this type of litigation than for other types of claims that might be covered under a general liability or worker's compensation policy (Bales and McGhghy (2002) and Duncan (2005)).

Employment discrimination is also a category of lawsuits experiencing considerable growth in both number of filings and awarded damages over the last decade. The majority of employee discrimination suits are brought under Title VII of the Civil Rights Act of 1964,[16] which was amended in 1991 to allow plaintiffs to elect a jury trial, to claim damages for emotional distress, and to pursue punitive as well as compensatory damages. As noted by Clermont and Schwab (2004), Reeves (2007), and Levit (2008), these changes have sparked a surge in Title VII filings against employers as well as substantial increases in requested damages, which also make this type of suit one of increasing relevance to market participants.

I search 10-Ks filed on EDGAR during the period 1996-2000 and identify 335 unique firms reporting pending employee discrimination lawsuits.[17] As detailed in Table 3, I eliminate firms with missing data or confounding events, which leaves a final sample of 110 unique firms. Basic descriptive statistics for these firms are presented in Table 4, and

[15] Admittedly, the lack of future business implications eliminates potentially interesting qualitative materiality disclosures but allows for a more reasonable estimation of the direct cost of an adverse outcome.

[16] Discrimination suits are also possible under 42 U.S.C. §1981 or §1983, the Americans with Disabilities Act of 1990, the Family and Medical Leave Act of 1993, and state labor codes.

[17] The litigation process can take many years, so more recent samples contain an increasing percentage of cases that are still pending.

industry membership is reported in Table 5.

The sample firms disclose a mean (median) of 4.25 (3) specific lawsuits of various types. If a firm has more than one pending employment discrimination suit, only the earliest filed suit is retained. As reported in Table 4, the mean damages paid over all cases in the sample is $10.5 million (0.9% of total assets). Excluding dismissals and verdicts for the defense, the mean damages paid among cases with a non-zero payout is $13.6 million (1.2% of total assets). As noted in Table 6, allegations of race or gender discrimination are the most common in the sample, consistent with the population of discrimination lawsuits filed.

Only six firms (5.45%) of sample firms disclosed a quantitative estimate of the potential loss for the specific sample case, and four additional firms (3.64%) disclosed an aggregate accrual for a set of cases including the sample cases. Of the six firms with quantitative estimates for the specific case, five had point estimates and one provided a range. Three of the estimates appear to be based on plaintiff-rejected settlement offers that the firm believed suggested a non-zero minimum loss (although rejected settlement offers are not always interpreted this way). One point estimate exactly matches the settlement announced in the subsequent period, suggesting that the settlement negotiations were substantially complete (albeit undisclosed) at the time of the 10-K filing. No support is provided for either of the remaining two point estimates, and both turn out to be substantially higher than actual damages realized.

Information about trial verdicts (both bench and jury), dismissals, and nonconfidential settlements are collected from subsequent 10-Ks, Lexis-Nexis, and Westlaw. Of the 110 cases, 107 firms reported the outcome (win, lose, settle, etc.) of the previously disclosed

case in a subsequent 10-K or 10-Q. Of the 107 reporting the case resolution in the 10-K or 10-Q, 80 also self-reported the dollar amount of the loss. The majority (77 cases or 70%) of cases in the sample are settled, which is consistent with Clermont and Schwab's (2004) investigation of trends in employment discrimination lawsuits over this period. A fraction of the cases (18 cases or 16.4%) are dismissed via pretrial motions, and only 15 cases (13.6%) proceed to trial (with 8 bench trials and 7 jury trials).

5 Results

5.1 Univariate Analyses

Table 7 provides information on the proportion of firms in the total sample with each disclosure characteristic from Model 1 as well as Chi-square tests for the difference in frequency across the value of *Loss*. In the total sample, 37.27% of the firms suggest they have a loss accrual, 12.73% have a materiality warning, 30.91% suggest the likelihood of loss is remote, 76.36% have a statement regarding the strength of their defense, and 20.00% indicate a potential willingness to settle. Consistent with predictions, a higher proportion of the *Loss* = 1 group have *Accrual* = 1, *Material* = 1, and *SettleRef* = 1 than the *Loss* = 0 group. There is no evidence of a difference in the proportion of *Loss* = 1 firms with *Remote* = 1 or *Defense* = 1 than *Loss* = 0 firms.

Table 8 and Table 9 provide correlation matrices for the independent variables for Models 1 and 2. Although there are some statistically significant correlations among the variables in Model 2, there is no evidence of correlations of a strength sufficient to seriously affect the multivariate analyses. Where applicable, untabulated frequency analysis leads to equivalent conclusions.

5.2 Multivariate Analyses

Results of the logistic regression of the disclosure variables on *Loss* are presented in Table 10. Column 1 provides results of the primary model as specified in Model 1. The coefficients on *Accrual*, *Material*, and *SettleRef* are significant at the 1% level (one-tailed) in the predicted directions. The positive association between *Accrual* and the likelihood of loss suggests that references to an accrual or to the need for an accrual are indicative of higher managerial assessments of the probability of loss, consistent with appropriate application of SFAS 5 recognition requirements above some threshold. More interestingly, the significant coefficient on *Accrual* also suggests that disclosures referencing an accrual relate to meaningfully different likelihoods of loss than those silent on the accrual status. The absence of a comment regarding an accrual does not just reflect less transparency than a firm revealing the accrual but rather suggests a lower probability of loss for these "no comment" firms. This is consistent with firms both accruing and disclosing the existence of the accrual for cases where the probability of loss is sufficiently high enough to overcome legal discovery concerns related to the accrual rather than firms accruing appropriately but failing to disclose the existence of the accrual.

The positive relation between *Material* and the likelihood of loss suggests that warnings about the possibility of an adverse outcome having a material impact on firm performance or financial condition are more common when the probability of loss is higher, which is consistent with an "expected value" application of SFAS 5. Although a strict reading of SFAS 5 implies a sequential decision process where potential materiality is considered first before the probability assessment is made, Newton (1977), Reckers and

Stagliano (1979), Lewis (1980), and Schultz and Reckers (1981) find that interviews and experiments with auditors suggest a significant number of practitioners consider both the possible dollar loss and the probability of such a loss simultaneously when determining materiality. Using this type of approach, materiality should be positively correlated with the likelihood of loss. The significant coefficient on *Material* also suggests that disclosures with materiality warnings are distinguishable in terms of the odds of loss from disclosures with no such warnings, despite the fact that the firms have no obligation to disclose cases except those considered material.

The positive relation between *SettleRef* and *Loss* implies that a settlement reference in the 10-K disclosure reflects a higher probability of loss, which is consistent with the high (although not perfect) correlation between a disclosed willingness to settle and an eventual resolution via settlement (with its related realization of loss). This result is also consistent with legal policies preventing a reference to the possibility of a settlement except in cases where the internal decision to seek a settlement has already been made.

Although not significant at the 10% level (two-tailed p-value = 0.1368), Table 10 suggests that *Defense* might be positively related to the likelihood of loss in a sufficiently large sample. This would be somewhat surprising given that the AICPA and ABA both assert that such statements have indeterminate meaning. At face value, the *Defense* statements would seem to suggest a negative association with the probability of loss, if anything (i.e., if defenses are strong, then they should be less likely to lose). However, it could be that these supposedly "safe" statements tend to be included when there is a need to lighten an otherwise grim disclosure. This variable is discussed further in Section 5.3.

As the coefficient on *Remote* is insignificant, I find no evidence that the designated

AICPA statements reflect a lower probability of loss. The AICPA interpretation pertains to discussion of the probability of loss within the context of an audit response letter, and SFAS 5 does not require the disclosure of loss contingencies truly thought to have a remote probability of loss, so there may in fact be no correlation between the probability of loss and these phrases as used in the financial statement or it may take a larger sample with more instances of these phrases to isolate the relation between these variables.

Columns 2, 3, and 4 contain additional ex post analysis beyond the primary results discussed above. While classifying the contingency disclosures, I noted that many firms insert additional caveats or cautionary language (e.g., "Litigation is inherently uncertain" or "Although no assurance can be given...") into the pending litigation paragraph. I examine whether the use of this additional cautionary language is correlated with management's estimate of the probability of loss, as this additional warning language could be used to signal a higher probability of loss to investors without disclosing an accrual and inviting the related risks. I estimate Model 1 plus an indicator variable (*Cautionary*) set equal to one for those firms with additional cautionary language. These results are presented in Column 2 of Table 10. I find no evidence that the cautionary language reflects a greater likelihood of loss, and primary results are unchanged. Further investigation into disclosure patterns across auditors reveals that this additional cautionary language is more likely to appear in firms audited by Arthur Andersen or KPMG. [18] The variation in the use of this language thus appears to be related to auditor policy rather than to the underlying probability of loss.

Results presented in Column 3 of Table 10 contain an additional variable for the

[18] I do not find any systematic patterns for other Model 1 variables across specific auditors.

class action status of the firm. Supplemental frequency analysis reveals a significant difference in the frequency of class actions between *Loss* = 1 firms and *Loss* = 0 firms, and further investigation provides evidence that the frequency of class action status also differs across values of *Accrual*, *Material*, *Remote*, and *SettleRef*. I estimate Model 1 plus a class action indicator variable to ensure that results are not sensitive along this dimension. The coefficient on *ClassAction* is positive and significant at the 10% level (one-tailed p-value = 0.0592), which is consistent with class action cases representing either a larger or more viable threat of loss. Results for all other variables are comparable to primary results in Column 1.

Column 4 of Table 10 repeats the primary results with the addition of a control variable for the labor intensity of the firm, which could capture either the firm's potential exposure to large losses to multiple plaintiffs or the firm's incentives to fight this particular kind of litigation. I proxy for labor intensity with the number of employees per million dollars of sales revenue where more employees per dollar of sales is considered a more labor intensive firm. The coefficient on *Employee* is positive and significant at the 5% level (two-tailed p-value = 0.0485), which suggests that more labor intensive firms are also more likely to realize non-trivial losses from disclosed employee discrimination suits than less labor intensive firms. Results for all other variables are comparable to primary results in Column 1. Column 5 of Table 10 presents the model with all three of the ex post control variables. Results are comparable to those in the preceding columns.

Results for Model 2 relating the predicted probability of loss to the market reaction at the case resolution date are presented in Table 11 using a slightly reduced sample. Of the 110 observations using in the preceding analysis, nine are eliminated for missing

price data. Although observations with obvious confounding events are removed in the initial sample selection, analysis of studentized residuals and DFFITS measures suggest several influential observations of concern. After further investigation, two additional observations are deleted.[19] A third observation (Shoney's, Inc.) proves to be a valid but far outlying observation.[20] Given the influence of this observation on some coefficient estimates, the results are presented both with (Columns 1 and 3) and without (Columns 2 and 4) this observation. Columns 1 and 2 include cases with zero damages whereas Columns 3 and 4 include only those cases with a non-zero realized loss.

The coefficient β_2 on *Magnitude* is significant at the 10% level (one-tailed) or better in the predicted direction in Columns 1, 2, and 4 but is insignificant (p-value of 0.1020) in Column 3. The coefficient β_3 on *ProbLoss*Magnitude* is significant at the 10% level (one-tailed) or better in the predicted direction in all columns. The control variable *Settlement* is significant at the 10% level (one-tailed) in the predicted direction in Columns 1, 2, and 3 (and has one-tailed p-value of 0.1017 in Column 4), which is consistent with prior evidence that the market reacts positively to settlements. The coefficients on *ProbLoss*Win*, *ClassAction*, and *Punitive* are all insignificant at conventional levels.

The significantly negative relation between the realized magnitude of loss and the market reaction to the announcement of the loss (as captured in β_2) is consistent with the loss representing a reduction in firm value. The term *ProbLoss*Magnitude* captures the market's pre-announcement expectation regarding the contingency. The positive

[19] One firm has a stock price less than one dollar during the relevant period and exhibits erratic returns, and the second has an unrelated confounding event on day +1.

[20] Considered by many legal scholars to be the case that marks the beginning of the Title VII class action resurgence, Shoney's $134,500,000 settlement represented more than 25% of its total assets (as compared to the mean payout of 1.1% across sample firms with non-zero damages).

coefficient on β_3 is consistent with the market expectation offsetting the realized loss—the event period CAR reflects only the difference between the expected and the realized loss. Assuming that the actual magnitude is a reasonable proxy for the market's estimate of magnitude, the significant coefficient suggests that *ProbLoss* is correlated with the probability of loss used by the market when valuing the legal contingency.[21] Although I cannot assert that the market does in fact use the financial statements to estimate the probability of loss in a way similar to my estimation of *ProbLoss*, this evidence implies that the disclosures yield an estimate that is at least consistent with the information used by the market. Even if the market is using other sources (with similar implications) to form their expectations, these results indicate that an investor *could* use the SFAS 5 disclosures to obtain a similar assessment. I must note, however, that the F statistics for all variations of Model 2 are only weakly significant if significant at all. This suggests that the model does not capture the variation in the market responses very well and precludes strong conclusions based on these results.

5.3 Sensitivity Analyses

The lawsuits in my sample average 29 months from suit filing to resolution. On average, cases in my sample first appear in a 10-K filing 16 months after the lawsuit is filed, and the last forward-looking 10-K disclosure is about 5 months before the case resolution. Disclosure classifications for the primary results are based on the last 10-K

[21] Theoretically, I expect $\beta_2 = -1$ and $\beta_3 = 1$, absent measurement error. The larger coefficient estimates are at least partially a result of a downward bias in my damages measure related to plaintiff's legal fees that are assessed to the defendant but not quantified at the resolution date and thus missing from my proxy for the true payout.

filed before the case is resolved, but I also classify relevant disclosures in preceding 10-Ks back to the later of the first 10-K after the lawsuit filing date or ten years before the case was resolved. I note changes in a firm's discussion of the case across multiple filings. Interestingly, only 29 of the 110 firms have changes to at least one of the collected disclosure variables over the period analyzed. Although this small number precludes analysis of the meaning of a change in disclosure, I repeat all analyses using variables constructed from the union of all available disclosures for each firm (rather than the last 10-K). Consistent with the small number of disclosure changes over the life of the cases, results (untabulated) are comparable to those presented.

The primary analyses use the initial case resolution (settlement, dismissal, or trial verdict). I further investigate the 15 cases with completed trials for evidence of appeals by either party. I find appeals in five cases: two unsuccessful appeals, two appeals that reduced damages by less than 10%, and one appeal that is still pending. Results are insensitive to replacing the two original trial loss amounts with post-appeal amounts.

The dependent variable *Loss* in Model 1 is assigned a value based on the distribution of total damages paid scaled by prior period total assets. I construct alternative measures of *Loss* using book value of equity (positive values only) and market value of equity, both as of the date of the last 10-K. Untabulated results for Model 1 and Model 2 using these alternate scalars are comparable to those presented. The median damages paid scaled by prior period total assets is used as the cutoff for classifying *Loss* in the primary results. There do not appear to be any obvious breaks in the distribution that would be preferable to the median nor evidence that the median in inappropriate; partitioning at the 75th percentile yields comparable results. Table 12 presents OLS results of the

primary model variables against a continuous loss dependent variable (*ContLoss*), which is measured as total damages paid scaled by prior period total assets.[22] The variables *Accrual* and *SettleRef* remain significant in the expected directions as in Table 10. In contrast to the logistic regression results, *Material* becomes insignificant here, and *Defense* becomes significant. Firm specific variation in the definition of "material" losses is more problematic with the continuous loss measure than with the dichotomous measure, which may explain the lack of significance of *Material*. The results also suggest that there is something in *Defense* related the size of the realized loss that drives *Defense* to appear significant with a continuous loss measure but not with a binary loss measure. Although *Defense* statements are explicitly non-predictive according to the ABA, these results suggest that future research could further explore the use of these disclosures.

Table 13 presents the results of a Model 2 regression with all of the disclosure variables from Model 1 included. The results for the Model 2 variables are similar to the primary Model 2 results and the overall model significance is reduced. It is, however, interesting to note that *Defense* is positive and significant (two-tailed, 10% level). This reiterates the implication from Table 12 that *Defense* may be related to continuous measures of loss (directly or as captured indirectly in the market return) although this relationship is not apparent using the binary measure of loss. There is no evidence that other Model 1 disclosure variables are related to the market response to the case resolution beyond their incorporation into the predicted probability of loss from Model 1.

In untabulated results, additional control variables for punitive damage requests,

[22] As measured, *ContLoss* has a lower bound of zero. Untabulated tobit results are consistent with those presented.

the use of a small (non-Big 5) auditor, references to insurance coverage, and the involvement of the Equal Employment Opportunity Commission are all considered in Model 1; all are insignificant and have no impact on primary results. Controls for small auditor, insurance coverage, and Equal Employment Opportunity Commission involvement are also insignificant and of no impact when added to Model 2. I also test Model 2 for sensitivity to the exclusion of the specified control variables, with an alternative class action dummy that includes only class actions successfully certified rather than both pending and certified classes, and with alternative predicted probabilities of loss from the variations of Model 1 presented in Columns 2-5 of Table 10. I find similar results on all analyses.

I also repeat estimation of Model 1 using an alternative definition of *Accrual* where firms that indicate they have passed the "probable" threshold but cannot estimate the loss are assigned *Accrual* = 0 rather than *Accrual* = 1. Results for this specification of *Accrual* are slightly weaker than those presented but are still statistically significant at the 1% level and conclusions are unaffected.

Lastly, in some areas of law, the legal venue can be a significant factor in the plaintiff's odds of success. Although the circuits are less divided on employment discrimination issues than many other types of cases, there still could be differences in legal venue that could affect the probability of loss or the market's expectation. Reeves (2007) suggests that the dynamics of employment discrimination litigation in the Eleventh Federal Circuit (Alabama, Georgia, and Florida) differ from those in the rest of the country. I construct a control variable (*Eleventh*) for cases filed in this locale. All (untabulated) results are insensitive to the inclusion of the variable, and the coefficient on

Eleventh is insignificant in all estimations. Further analysis of the venues for cases in my sample suggests that there is a disproportionate number of observations filed in the state of California (21 of 110 cases, with 30 states represented in all). I construct and test an indicator variable for suits filed in California. All (untabulated) results are insensitive to the inclusion of the variable, and the coefficient on *California* is insignificant in all estimations.

6 Conclusion

I investigate whether current contingent legal liability disclosures provide useful contingency valuation information to investors or if the legal environment drives firms to provide formulaic disclosures with little or no useful information. Using a sample of 110 firms that disclose now-resolved employee discrimination lawsuits in 10-Ks filed between 1996 and 2000, I test whether the components of these disclosures convey information about the outcome of the litigation.

I find that only 10 of 110 firms disclose an estimate (point, range, or aggregate) of the magnitude of the potential loss from litigation. However, I do find that certain textual elements of the disclosures are related to litigation outcomes. More specifically, I find that statements (or the lack thereof) regarding the accrual status of the contingency, the potential materiality of the loss, and the firm's willingness to settle can all be used to form a meaningful prediction of the likelihood of loss in a given suit, whereas I find no evidence that other components of these disclosures provide predictive information. I also find that my predicted probability of loss derived from the financial statements is weakly correlated with the market's expected probability of loss, which is consistent with the

market using the SFAS 5 disclosures or similar information. This suggests that concerned investors could or do use these reporting characteristics to assess the likelihood of loss.

These results suggest that although the costs and legal ethics associated with truthful disclosure of legal contingencies deter firms from fully disclosing contingency information, the observed compromise between reporting requirements under GAAP and legal incentives does contain some information relevant and useful for evaluating the loss contingency. For both investors and standard-setters considering upcoming changes to SFAS 5, this study highlights firms' continuing nondisclosure of the magnitude of potential losses from litigation but also demonstrates how the probability of loss can be estimated from components of current contingent legal liability disclosures. Future research will consider whether any of the disclosure components (or the precursory decision to disclose a specific case) provide incremental information over other market sources.

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Appendix

Examples of Contingent Legal Liability Disclosures

Coastal Corp.

"In October 1996, the Company, along with several subsidiaries, was named as a defendant in a suit filed by several former and current African American employees in the United States District Court, Southern District of Texas. The suit alleges racially discriminatory employment policies and practices and seeks damages in the amount of least $100 million and punitive damages of at least three times that amount. Plaintiffs' counsel are seeking to have the suit certified as a class action. Coastal vigorously denies these allegations and has filed responsive pleadings.

Although no assurances can be given and no determination can be made at this time as to the outcome of any particular lawsuit or proceeding, the Company believes there are meritorious defenses to substantially all of the above claims and that any liability which may finally be determined should not have a material adverse effect on the Company's consolidated financial position, results of operations or cash flows."

Florida Power

"Age Discrimination Suit - Florida Power and Florida Progress have been named defendants in an age discrimination lawsuit. The number of plaintiffs remains at 116, however, four of those plaintiffs have had their federal claims dismissed and five others have had their state age claims dismissed. While no dollar amount was requested, each plaintiff seeks back pay, reinstatement or front pay through their projected dates of normal retirement, costs and attorneys' fees. In October 1996, the court approved an agreement between parties to provisionally certify this case as a class action suit under the Age Discrimination in Employment Act. On August 10, 1998, Florida Power filed a motion to decertify the class, and the plaintiffs filed their response in opposition on September 30, 1998. A hearing date for the motion has not yet been set. Florida Power has entered into settlement discussions with the plaintiffs. In December 1998, plaintiffs alleged damages of $100 million. Company management, while not believing plaintiffs' claim to have merit, offered $5 million in an attempted settlement of all claims. Plaintiffs rejected that offer. As a result, management has identified a probable range of $5 million to $100 million with no amount within that range a better estimate of probable loss than any other amount; accordingly, Florida Power has accrued $5 million. There can be no assurance that this litigation will be settled, or if settled, that the settlement will not exceed $5 million. Additionally, the ultimate outcome, if litigated, cannot presently be determined."

Table 1
Examples of Disclosure Components

Variable	Value	Statement
Accrual	1	"We have accrued $5 million related to this claim."
	1	"We have accrued as necessary for this case."
	1	"Management believes the liability will not exceed existing accruals."
	0	"This liability is not represented on the consolidated balance sheet."
	0	"We make no reserves for this claim."
Material	1	"An adverse outcome could have a material impact on the firm's liquidity and financial condition."
	0	"We do not believe the outcome of this case will have a material impact on financial performance."
Remote	1	"We believe the plaintiff's case has no merit."
	1	"We believe the action will not result in a liability to the firm."
Defense	1	"We intend to defend these charges vigorously."
	1	"We believe we have meritorious defenses in this case."
SettleRef	1	"We may agree to a settlement if we feel it is in the best interest of our shareholders."
	1	"Arbitration hearings have been scheduled, and we hope to reach a satisfactory settlement in this matter soon."
Cautionary	1	"Litigation is inherently uncertain and difficult to predict."
	1	"No assurances can be given that this matter will be resolved as expected."

Notes: Example statements are representative of phrasings used for classification but are not exhaustive. All variables are assigned values of zero if there is no relevant statement within the legal contingency disclosure.

Table 2
Variable Definitions

Variable	Definition
Accrual	1 if the disclosure suggests that the firm has accrued a litigation liability or passed the "probable" threshold; 0 otherwise
CAR	Cumulative abnormal return from day −2 to day +2 calculated using a standard market model estimated over the 255 trading days (approximately one year) ending at day −46 and using the CRSP value-weighted return as the market return.
Cautionary	1 if disclosure contains additional cautionary language; 0 otherwise.
ClassAction	1 if case is certified class action; 0 otherwise.
ContLoss	Damages Paid/Total Assets
Defense	1 if disclosure contains a statement about strength or strategy of firm's defense; 0 otherwise.
Employee	Number of full-time equivalent employees per $1 million in sales revenue
Loss	1 if Damages Paid/Total Assets is above the median value for the sample; 0 otherwise.
Magnitude	Damages Paid/Market Value of Equity as of last 10-K date.
Material	1 if firm indicates that the lawsuit could have a material impact on financial performance or financial condition; 0 otherwise.
ProbLoss	Predicted probability of loss from Model 1.
Punitive	1 if case involves a request for punitive damages; 0 otherwise.
Remote	1 if disclosure contains a statement indicative of remote probability of loss in AICPA interpretation of SAS 12; 0 otherwise
Settlement	1 if case is settled out-of-court; 0 otherwise.
SettleRef	1 if disclosure contains reference to possibility of settlement; 0 otherwise.
Win	1 if Damages Paid = 0 (and therefore *Magnitude*=0); 0 otherwise.

Notes: Examples of specific disclosure components and classifications are provided in Table 1. Variables are described in further detail in Sections 3 and 5.3. Case details and case resolution information are obtained from EDGAR filings, Lexis-Nexis, and WestLaw.

Table 3
Sample Selection

	Firms
Disclose pending employee discrimination suit	335
Not publicly traded	(50)
Not traded on a major exchange	(52)
	233
Resolution missing and insufficient detail to track	(50)
Case involves executive counterclaims	(15)
Firm deregistered before resolution	(13)
Firm bankrupt before resolution	(12)
Case mentioned only in one-time attached exhibit	(10)
Confidential settlement	(9)
First disclosure is after case resolution	(9)
Firm acquired and parent does not disclose case	(5)
Model 1 Sample	110
Missing price data	(9)
Confounding event	(1)
Stock price less than $1.00	(1)
Model 2 Sample	99

Notes: Firms disclosing a pending employment discrimination suit are identified using regular expressions to search all 10-Ks, 10-K405s, and 10-KSBs available on EDGAR and originally filed between 1996 and 2000. Within firms with multiple employee discrimination suits, the earliest suit is selected. I search for case resolution information in subsequent filings, Lexis-Nexis, and WestLaw. Firms are eliminated for missing data or confounding events as detailed above. "Executive counterclaims" refers to (eliminated) observations where the discrimination case identified is part of a series of suits and countersuits between the firm and a former executive.

Table 4
Descriptive Statistics (Non-Ratios in Millions)

	N	Mean	Median
Current Assets	110	7,760.10	75.26
Total Assets	110	12,814.04	135.16
Long-Term Debt	110	1,940.96	16.40
Book Value of Equity	110	2,037.89	63.33
Market Value of Equity	109	9,212.99	136.29
Net Sales	110	5,662.95	171.00
Net Income	110	455.68	2.97
Operating Cash Flow	106	754.46	11.02
All Cases:			
Damages Paid	110	10.5138	0.0540
Damages Paid / Total Assets	110	0.0091	0.0008
Damages Paid / Current Assets	110	0.0371	0.0016
Damages Paid / Net Income	110	0.0414	0.0000
Damages Paid / |Net Income|	110	0.2870	0.0116
Damages Paid / Operating Cash Flow	106	−0.0050	0.0000
Damages Paid / |Operating Cash Flow|	106	0.1239	0.0071
Non-Zero Damages Only:			
Damages Paid	85	13.6184	0.2500
Damages Paid / Total Assets	85	0.0117	0.0019
Damages Paid / Current Assets	85	0.0480	0.0049
Damages Paid / Net Income	85	0.0536	0.0002
Damages Paid / |Net Income|	85	0.3714	0.0223
Damages Paid / Operating Cash Flow	83	−0.0065	0.0042
Damages Paid / |Operating Cash Flow|	83	0.1582	0.0178

Notes: Case resolution information is obtained from EDGAR filings, Lexis-Nexis, and WestLaw. Firm information is obtained from COMPUSTAT and EDGAR filings. Damages Paid equals the total dollar amount payable by the defendant at the case resolution (settlement or verdict) less any disclosed partial insurance coverage. Non-zero Damages Paid excludes dismissals and verdicts for the defense.

Table 5
Industry Distribution

SIC	Industry Name	Frequency	Percentage
73	Business Services	14	12.7%
35	Industrial Machinery and Equipment	10	9.1%
37	Transportation Equipment	8	7.3%
54	Food Stores	8	7.3%
38	Measuring, Analyzing, and Controlling Instruments	7	6.4%
58	Eating and Drinking Places	7	6.4%
36	Electronic Equipment, Except Computers	6	5.5%
49	Electric, Gas, and Sanitary Services	5	4.5%
28	Chemicals and Allied Products	4	3.6%
	All Others	41	37.2%
		110	100%

Table 6
Case Type

	Frequency	Percentage	Damages Paid ($MM)
Race	38	35%	$21.21
Gender	39	35%	$10.88
Sexual Harassment	20	18%	$3.79
Age	14	13%	$7.46
Ethnicity/Nationality	8	7%	$16.10
Other: Religion, Disability, Maternity	4	4%	$0.00

Notes: Some cases have multiple types of claims and are included in more than one category. Damages paid is the average damages paid (in millions) over all cases within the sample with that type of claim.

Table 7
Disclosure Characteristics by Outcome

	Total	Loss = 0	Loss = 1	Chi-Square
Accrual	0.3727	0.2080	0.5455	14.0368***
Material	0.1273	0.0182	0.2364	11.7857***
Remote	0.3091	0.3273	0.2909	0.1703
Defense	0.7636	0.7455	0.7818	0.2015
SettleRef	0.2000	0.0909	0.3091	8.1818***
N	110	55	55	

Notes: Variables are defined in Table 2. Mean values of disclosure variables are provided and reflect the proportion of firms with a value of one for the relevant disclosure type for all firms and by the value of *Loss*. Chi-square tests of difference in frequency across *Loss* are provided. *** indicates significance at the 1% level (two-tailed).

Table 8
Correlations Among Disclosure Characteristics

	Accrual	Material	Remote	Defense
Material	0.04410			
Remote	−0.06805	−0.01932		
Defense	−0.14644	0.14825	0.14060	
SettleRef	0.13161	0.08183	−0.13771	−0.14979

Notes: Variables are defined in Table 2. Pearson correlation coefficients are presented and are comparable to (untabulated) Chi-Square tests of differences in frequency. All correlations are insignificant at conventional levels. N=110.

Table 9
Correlations Among Variables in Market Reaction Model

	CAR	ProbLoss	Magnitude	Settlement	ClassAction	Punitive
CAR		0.18128*	0.11969	0.11888	0.10373	−0.01849
ProbLoss	0.15821		0.48469***	0.31532***	0.30531***	0.04555
Magnitude	0.22411**	0.18999**		0.48593***	0.21569**	−0.06162
Settlement	0.14033	0.26457***	0.12251		0.09436	−0.15474
ClassAction	0.10569	0.28712***	0.23760**	0.09436		0.05983
Punitive	−0.03897	0.05539	0.08397	−0.15474	0.05983	

Notes: Variables are defined in Table 2. Pearson correlation coefficients are presented below the diagonal, and Spearman correlation coefficients are presented above the diagonal. Correlations presented are comparable to (untabulated) Chi-Square tests of differences in frequency where applicable. N=99 for all correlations involving *CAR*, N=109 for for correlations involving *Magnitude*, and N=110 otherwise. ***, **, and * indicate significance at the 1%, 5%, and 10% level (two-tailed).

Table 10
Model 1: Disclosure-Outcome Logistic Regression

$$Loss = f(\alpha + \beta_1 Accrual + \beta_2 Material + \beta_3 Remote + \beta_4 Defense + \beta_5 SettleRef + \epsilon)$$

	Pred. Sign	(1)	(2)	(3)	(4)	(5)
Intercept		−1.7167***	−1.8148***	−2.0504***	−1.8165***	−2.6388***
		(0.5974)	(0.6380)	(0.6610)	(0.6305)	(0.8069)
Accrual	+	1.8331***	1.8285***	1.7972***	2.1315***	2.1253***
		(0.4984)	(0.4989)	(0.5091)	(0.5738)	(0.6007)
Material	+	3.0368***	2.9258***	2.9612***	3.3643***	3.1275***
		(1.1002)	(1.1218)	(1.1103)	(1.1388)	(1.2020)
Remote	−	0.0229	0.0326	0.1581	−0.6820	−0.5240
		(0.4968)	(0.4990)	(0.5123)	(0.5732)	(0.6011)
Defense	+/−	0.6199	0.6525	0.6719	0.4682	0.5877
		(0.5663)	(0.5734)	(0.5826)	(0.6227)	(0.6653)
SettleRef	+	1.6733***	1.7298***	1.5835***	1.7831***	1.9987***
		(0.6324)	(0.6435)	(0.6507)	(0.6998)	(0.7804)
Cautionary	+		0.2543			0.6023
			(0.5377)			(0.6220)
Class Action	+			0.7636*		1.2363**
				(0.4890)		(0.5562)
Employee	+/−				0.0310**	0.0360***
					(0.0187)	(0.0204)
N		110	110	110	101	101
Likelihood Ratio		37.015***	37.237***	39.472***	42.549***	49.0633***
Percent Concordant		75.3	77.5	80.3	83.9	86.4

Notes: This table presents estimates of the logistic regression of Model 1. Variables are defined in Table 2. The dependent variable is *Loss*. Coefficient estimates are provided with standard errors in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level (one-tailed if a sign is predicted, two-tailed otherwise) based on residual Chi-square tests. Statistical significance levels are comparable to those from Wald Chi-square statistics based on the parameter estimates.

Table 11
Model 2: Market Reaction to Case Resolution

$$CAR_{(-2,+2)} = \alpha + \beta_1 ProbLoss*Win + \beta_2 Magnitude + \beta_3 ProbLoss*Magnitude + \beta_4 Settlement + \beta_5 ClassAction + \beta_6 Punitive + \epsilon$$

	Pred. Sign	(1)	(2)	(3)	(4)
Intercept		−0.0197	−0.0200	−0.0395	−0.0336
		(0.0233)	(0.0233)	(0.0314)	(0.0316)
ProbLoss*Win	+	0.06125	0.0659		
		(0.0653)	(0.0655)		
Magnitude	−	−3.0305*	−4.4538**	−2.6769	−4.3955*
		(2.2004)	(2.6554)	(2.3496)	(2.8282)
ProbLoss*Magnitude	+	3.9803*	6.6510**	3.5137*	6.2716*
		(2.4371)	(3.7026)	(2.5934)	(3.9314)
Settlement	+	0.0338*	0.0333*	0.0422*	0.0394
		(0.0227)	(0.0227)	(0.0305)	(0.0305)
ClassAction	+/−	0.0115	0.0084	0.0299	0.0272
		(0.0163)	(0.0166)	(0.0194)	(0.0199)
Punitive	+/−	−0.0098	−0.0104	−0.0089	−0.0094
		(0.0160)	(0.0159)	(0.0189)	(0.0189)
N		99	98	78	77
R^2		0.1115	0.0713	0.1332	0.0958
Adjusted R^2		0.0535	0.0101	0.0730	0.0183
F Value		1.92*	1.16	2.21*	1.50

Notes: This table presents estimates of ordinary least squares regressions of Model 2. Variables are defined in Table 2. The dependent variable is the cumulative abnormal return from day −2 to day +2 where day 0 is the date of the announcement of the case resolution. Coefficient estimates are provided with standard errors in parentheses. ** and * indicate significance at the 5% and 10% level, one-tailed when a sign is predicted and two-tailed otherwise. Column 1 includes all observations with complete data, and Column 2 repeats these results excluding one extreme observation (Shoney's). Columns 3 and 4 repeat Columns 1 and 2 with only those cases where there is a realized loss.

Table 12
Supplemental Analysis: Disclosure-Outcome Regression with a Continuous Loss Measure

$$ContLoss = \alpha + \beta_1 Accrual + \beta_2 Material + \beta_3 Remote + \beta_4 Defense + \beta_5 SettleRef + \epsilon$$

	Pred. Sign	
Intercept		−0.0087 (0.0076)
Accrual	+	0.0118** (0.0065)
Material	+	−0.0071 (0.0095)
Remote	−	0.0014 (0.0068)
Defense	+/−	0.0131** (0.0076)
SettleRef	+	0.0193*** (0.0080)
N		110
R^2		0.0995
Adjusted R^2		0.0562

Notes: This table presents estimates of the ordinary least squares regression of Model 1 using a continuous loss dependent variable (*ContLoss*) measured as total damages paid scaled by prior period total assets. All other variables are defined in Table 2 as before. Coefficient estimates are provided with standard errors in parentheses. *** indicates significance at the 1% level and ** indicates significance at the 5% level (both one-tailed when a sign is predicted and two-tailed otherwise). Untabulated tobit results are comparable.

Table 13
Supplemental Analysis: Market Reaction to Case Resolution with Disclosure Variables

$$CAR_{(-2,+2)} = \alpha + \beta_1 ProbLoss{*}Win + \beta_2 Magnitude + \beta_3 ProbLoss{*}Magnitude + \beta_4 Settlement + \beta_5 ClassAction + \beta_6 Punitive + \beta_7 Accrual + \beta_8 Material + \beta_9 Remote + \beta_{10} Defense + \beta_{11} SettleRef + \epsilon$$

	Pred. Sign	
Intercept		−0.0383 (0.0275)
ProbLoss*Win	+	0.0361 (0.0681)
Magnitude	−	−3.0486* (2.3235)
ProbLoss*Magnitude	+	3.8489* (2.5693)
Settlement	+	0.0212 (0.0234)
ClassAction	+/−	0.0063 (0.01756)
Punitive	+/−	−0.0138 (0.0163)
Accrual	+/−	0.0085 (0.0166)
Material	+/−	−0.0096 (0.0248)
Remote	+/−	−0.0139 (0.0176)
Defense	+/−	0.0395* (0.0206)
SettleRef	+/−	0.0291 (0.0214)
N		99
R^2		0.1654
Adjusted R^2		0.0598
F Value		1.57

Notes: This table presents estimates of ordinary least squares regression of Model 2 with all of the Model 1 disclosure variables included. Variables are defined in Table 2. The dependent variable is the cumulative abnormal return from day −2 to day +2 where day 0 is the date of the announcement of the case resolution. Coefficient estimates are provided with standard errors in parentheses. * indicates significance at the 10% level (one-tailed when a sign is predicted and two-tailed otherwise).

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"The Reporting of Contingent Legal Liabilities: Employment Discrimination Lawsuits" (based on dissertation)

"The Importance of Distinguishing Errors from Irregularities in Restatement Research: The Case of Restatements and CEO/CFO Turnover" with A. J. Leone and B. P. Miller (*The Accounting Review*, forthcoming)

WORK IN PROCESS

"Auditor Turnover surrounding Accounting Irregularity Announcements" with A. J. Leone and B. P. Miller

"Surviving Fraud: Characteristics of Restatement Firms Avoiding Bankruptcy" with A. J. Leone and B. P. Miller

"SEC Comment Letters and 'Voluntary' Disclosures: Retailers' Reporting of Income from Gift Card Breakage"

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