

PRIVATE LITIGATION AS A REGULATOR OF ACCOUNTING STANDARDS

by

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DISSERTATION ABSTRACT

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Title: Private Litigation as a Regulator of Accounting Standards

I examine the impact of the trend of private class actions targeting alleged violations of Generally Accepted Accounting Principles (GAAP). I document the specific allegations in GAAP lawsuits and find that allegations involving revenue recognition and asset impairment recognition are two of the most common areas of GAAP cited. I test whether lawsuits lead to a reduction in the allegedly improper behavior, whether sued firms and their peers make other financial reporting changes, and whether these changes change firms' stock price characteristics. I find that following relevant lawsuits, sued firms, firms in the same industry, and firms with a shared auditor generally exhibit less aggressive revenue recognition, but firms may increase aggressive revenue recognition in certain cases. Next, I examine the impact of asset impairment recognition allegations on the reporting of negative special items. I find few changes directly associated with these allegations but show that other litigation is associated with both increases and decreases in the propensity and size of negative special item reporting. I note that GAAP violations most often arise in an attempt to meet or beat analysts' estimates, and I show following litigation firms are often more likely to beat analysts' expectations by a larger margin. I also find significant increases in real earnings management of sued firms and their peers following many lawsuits, indicating a shift away from accruals-based management

towards real activities management. Finally, I find mixed evidence of changes in stock return attributes. In some cases I observe significant changes consistent with reduced litigation risk and in others I observe the opposite. The results have implications for accounting standard setting and show that the legal system plays a critical role in shaping the financial reporting environment.

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CHAPTER I

INTRODUCTION

Private securities litigation alleging violations of Generally Accepted Accounting Principles (GAAP) has become increasingly common over the last two decades. This phenomenon is a side effect of the Private Securities Litigation Reform Act of 1995 (PSLRA). The PSLRA aimed to reduce frivolous litigation by creating difficult hurdles that plaintiffs must overcome at the beginning of a lawsuit. Chiefly, plaintiffs must point to facts indicating that managers acted *intentionally* when making material misstatements. One method plaintiffs have used to meet this requirement is to focus on cases where there is an apparent violation of GAAP (Johnson, Nelson, & Pritchard, 2007; Choi, Nelson & Pritchard, 2009). While not dispositive, many courts will consider GAAP violations as evidence of intent, and prior literature indicates that cases alleging GAAP violations are more likely to result in settlements for the plaintiffs (Cutler, Davis, & Peterson, 2014). Therefore, accounting standards are now an important determinant of which cases are brought to court and which cases result in settlements. Perhaps more importantly, every time a court issues an opinion in a GAAP-related case, it can essentially become part of GAAP. An opinion addressing a novel fact situation and/or interpreting the law in a new way sets a precedent and provides new information that may change the behavior of firms hoping to avoid litigation in the future. Notably, cases are selected and conducted by private plaintiff's attorneys with a self-interested desire to maximize recoveries, and hence their own contingent fees. Actors with a more direct responsibility for influencing and enforcing accounting standards, chiefly the SEC and the FASB, often play no direct role in these lawsuits. Auditors are another important stakeholder with respect to accounting standards, and while they also do not decide what cases are brought to court, they may sometimes find themselves as defendants.

What are the consequences of an increased role for private litigation in enforcing accounting standards? Plaintiff's attorneys may serve as a useful private supplement to public

enforcement of accounting standards, harnessing private incentives to deter bad behavior and improve financial reporting, or they may induce other, unintended consequences. To shed light on this issue, I test whether private class actions alleging GAAP violations result in measurable financial accounting and reporting changes.

To answer these questions, I first examine all available lawsuit complaints containing GAAP allegations and provide descriptive evidence on which elements of GAAP are alleged to have been violated. Next, I select two common categories of GAAP violations where I can test for subsequent changes directly related to the areas of GAAP targeted in the lawsuit. In addition to the sued firms, I also look at peer firms most likely to be impacted by the lawsuit. Specifically, I look at firms in the same industry and market decile as the sued firm, and firms who share an auditor and geographic proximity with the sued firm. Further, I distinguish lawsuits based on their outcome, to see whether any observed effects differ if the lawsuit was dismissed or settled for a significant sum. I also measure the number of times a decision in each case is cited in future judicial decisions or court documents. Decisions containing more new information, such as decisions addressing previously undecided questions of law or novel facts and circumstances, should result in a greater number of citations. Lawsuits providing the most new information should induce the most changes in financial reporting behavior.

Based on my search of lawsuit complaints, the first category of GAAP violations I examine is improper revenue recognition, by far the most common GAAP allegation. For these cases, I test whether litigation affects discretionary revenues, a measure created by Stubben (2010) designed to capture aggressive revenue recognition. Another large subset of lawsuits alleges that the sued firm improperly delayed or altogether avoided recognizing an asset impairment charge, such as a goodwill impairment or inventory write-down. For this group, I test for effects on the probability that a firm will report negative special items in the income statement, as well as the size of items reported.

Next, I test for further, indirect consequences of lawsuits on financial reporting as managers attempt to reduce future litigation risk. I note that most alleged GAAP violations occur in the context of attempts to meet or surpass analysts' earnings expectations. Therefore, I test whether the frequency of meeting or beating analysts' consensus earnings estimates changes after lawsuits. Relatedly, I test whether GAAP lawsuits induce firms to shift towards managing earnings through real earnings management. Real earnings management may allow managers to achieve earnings targets without leaving them as vulnerable to litigation. Finally, I attempt to test if changes by managers are successful at reducing their litigation risk. Since certain stock return patterns are critical determinants of litigation, I test whether any changes in response to litigation are successful at reducing these patterns, namely stock return volatility, negative skewness, and large 1-day declines.

My results indicate significant changes in the financial accounting of sued firms and their industry and circuit peers. In the revenue recognition tests, I find few results for firms that are actually sued or for shared auditor peers. But for industry peers of sued firms, I find that all lawsuits, but especially GAAP and revenue recognition lawsuits, are usually associated with significantly reduced discretionary revenues, indicating that private litigation is an effective deterrent mechanism in this regard. Interestingly though, for industry peers, when an improper revenue recognition case is highly cited, there is a significant incremental positive effect on discretionary revenues. Managers and practitioners may perceive that these cases clearly spell out certain patterns of behavior that will or will not result in liability, creating a form of safe harbor that emboldens managers to behave more aggressively.

When firms are accused of failing to make a timely write-down of an impaired asset, I observe changes in NSPI reporting that vary significantly depending on the outcome and type of the case. Litigation appears to induce changes in behavior, but it is difficult to find clear patterns and interpret exactly what is happening. When I test for changes in the propensity to meet or beat

analysts' forecasts after lawsuits, I find a general pattern of firms beating analysts' estimates by larger margins, and shifting away from just meeting or beating by small amounts. It is not clear if this results from changes in earnings management, changes in the way that managers communicate and manage expectations, or both. It is also possible that observed changes in NSPI reporting or the propensity to meet or beat forecasts are really symptoms of some other unobserved factor(s).

While lawsuits appear to affect firms' propensity to meet or beat analysts' forecasts, it is also interesting to know if lawsuits change the manner in which firms manage earnings to meet expectations. Theoretically, managing earnings through real activities should involve less legal costs than managing through accruals, since real earnings management does not involve actionable fraud unless a manager makes misleading public statements. In tests of real earnings management, I find evidence that in many cases, both sued firms and their peers increase real earnings management after lawsuits, and this is strongest for lawsuits alleging GAAP violations and where the judicial opinion is highly cited. Thus it is possible that the trend of private GAAP lawsuits is pushing firms away from accruals-based earnings management and towards real earnings management.

Finally, to better understand the consequences of the financial reporting changes that I observe, I also conduct tests of changes in stock return characteristics following lawsuits. If firms make changes to reduce their litigation risk, then I expect to see stock return characteristics consistent with this reduced risk. Large, sudden stock price declines are a critical determinant of litigation, so efforts to reduce future litigation risk should attempt to minimize the occurrence of such negative returns. To proxy for the likelihood of a sudden, sharp stock price decline, I use stock return volatility, stock return skewness, and the minimum 1-day stock return for each period. Prior literature has found significant relationships between these variables and litigation risk (e.g. Kim and Skinner, 2012). For sued firms and their industry peers, I generally find

significant changes that are sometimes consistent with successful reduction of litigation risk, but the results are not uniform. Shared auditor peers, however, show significant changes in stock return patterns consistent with increased litigation risk. These auditor peer firms generally display significantly higher stock return volatility and larger minimum daily stock declines.

This study provides contributions to multiple streams of literature. First, my findings are important to the literature and debate on accounting standard-setting. I highlight how U.S. GAAP exists inside of our common law judicial system, where private disputes and judicial decisions outside of the control of standard-setting bodies can shape the future implementation of GAAP. This fact should play a role in important debates about accounting standards. For example, some parties argue that accounting standards should focus on a valuation function, while others argue for a stewardship/performance-evaluation function. The former function calls for more fair value accounting, while the latter requires more conservatism and verifiability (Kothari, Ramanna, & Skinner, 2010). My results show that in some areas, notably revenue recognition, the U.S. legal system pushes managers toward conservatism and verifiability, but this can dramatically vary based on the outcome of the case. Other results leave open the possibility that litigation may make firms less likely to report negative special items, implying that the legal system may sometimes hinder a goal of conservatism. These findings emphasize the importance of legal institutions in fashioning accounting standards, and also have implications for issues of convergence. Even if full convergence between IFRS and U.S. GAAP were achieved, the unique U.S. system of private litigation could lead to substantial variation in implementation between the U.S and other countries, and even within the U.S. This role of the judicial system in GAAP is not fully recognized by standard-setters, practitioners, or judges, making the design and enforcement of accounting standards less effective than it might be.

Similarly, this study contributes to the literature on financial reporting and legal institutions, illustrating how legal rules shape managers' reporting choices, often in unexpected

ways. The increased focus on GAAP violations in private litigation was not an intended goal of the PSLRA. Choi et al. (2009) show that this shift is not merely the result of filtering out of meritless cases, because many cases that might have resulted in substantial settlements in the pre-PSLRA period are now dismissed or no longer brought if they lack “hard evidence” such as a restatement. My results are a first step in understanding the consequences of this shift towards accounting-focused cases.

Finally, this study contributes to the debate on the effectiveness of class action litigation under Rule 10b-5. Ostensibly, the private right to sue under Rule 10b-5 is intended to provide compensation to shareholders harmed by deceptive statements. However, Rule 10b-5 arguably does a poor job of compensating victims, since any settlements paid to defrauded shareholders are at least partially paid by the current shareholders. In this study, I show that while lawsuits may not adequately compensate defrauded shareholders, in some cases they might at least provide current and future shareholders of sued firms the benefit of improved financial reporting. But in other cases financial reporting may get worse, compounding the problem. In the absence of effective compensation, the utility of Rule 10b-5 rests on its effectiveness as a deterrent against future misbehavior. From this perspective, I provide evidence on areas where class actions appear to deter the type of behavior that they target, areas where they have no effect, and areas where they could actually encourage undesirable behavior.

CHAPTER II

BACKGROUND AND LITERATURE REVIEW

Legal Context

Uniquely in the United States, private actors play an outsized role in the enforcement of securities laws. The chief legal rule under which most anti-fraud litigation occurs is known as Rule 10b-5. This rule was promulgated by the SEC under the authority of the 1934 Exchange Act and broadly prohibits, among other things, the making of “any untrue statement of a material fact” or the omission of “a material fact necessary in order to make the statements made...not misleading” (17 C.F.R. 240.10b-5). Subsequent judicial interpretations of the rule allow private shareholders to enforce it through class action litigation. In practice, litigation is generally initiated and conducted by professional plaintiff’s law firms rather than shareholders. Plaintiff’s lawyers watch the market and attempt to identify cases where the potential damages and likelihood of success create high expected payoffs.

In order to satisfy the elements of a successful 10b-5 claim, plaintiffs will generally require a large stock price drop following the revelation to the market that the firm has made misleading statements or omissions. For example, a firm may announce strong sales and earnings, then later announce that they are restating earnings because the earlier sales numbers were based on improperly recognized revenue. If the latter announcement is accompanied by a sharp stock price decline, then plaintiffs can more easily show that the false statements were material and caused losses to investors. Anyone who purchased stock during the time that the price was artificially inflated is eligible to be a member of the class represented in the lawsuit.

Worried that plaintiffs’ attorneys would sue large publicly-traded firms any time there was a significant stock price decline and then use the costly discovery process to “fish” for possible violations, Congress passed the PSLRA in 1995, even overriding a veto by President Clinton. The PSLRA aimed to filter out meritless lawsuits at an early stage by imposing strict

requirements on the complaint that is filed to initiate the lawsuit. Most important of these requirements was that the plaintiffs provide “with particularity facts giving rise to a strong inference” that the sued managers acted with *scienter*. (15 U.S.C. § 78u-4(b)(2)). *Scienter* is defined as a “mental state embracing intent to deceive, manipulate, or defraud” (*Ernst & Ernst v. Hochfelder*, 1976). Early in the litigation, defendants generally file a motion to dismiss, arguing that the plaintiffs have failed to meet the PSLRA standards. Plaintiffs are not allowed to request internal documents or depositions from the firm until a judge decides whether the PSLRA requirements have been met. Therefore plaintiffs must create a strong inference of *scienter* primarily using publicly available information. If the judge determines they have not established this inference, the case will be dismissed. On the other hand, if the case survives dismissal it will almost always settle.

One method that plaintiffs quickly seized upon was to increasingly focus on cases where they could allege a violation of GAAP. While “the mere publication of inaccurate accounting figures, or a failure to follow GAAP, without more, does not establish *scienter*” (*Fine v. American Solar King Corp.*, 1990), many courts have held that “when combined with other circumstances suggesting fraudulent intent, however, allegations of improper accounting may support a strong inference of *scienter*” (*Marksman Partners v. Chantal Pharmaceutical Corp.*, 1996). For example, in a class action against Accredo Health, Inc., the plaintiffs alleged that Accredo’s managers deceived the market when they reported strong earnings but failed to write down a large amount of doubtful accounts receivables of an acquired company. The plaintiffs successfully alleged facts creating a strong inference of *scienter* by noting that the Accredo managers had been part of the due diligence process in acquiring the company and also received regular reports concerning outstanding accounts receivables. Therefore it was likely they knew the accounts should have been written down in accordance with GAAP.

Table 1 shows that the number and proportion of lawsuits with GAAP allegations increased dramatically starting in 1996, the first year the PSLRA became effective (See Appendix for all tables).¹ Table 2 shows the settlement rate for Non-GAAP and GAAP cases. GAAP cases have settled at a higher rate in each year of the post-PSLRA period, indicating why plaintiffs have continued this trend. Prior literature confirms that GAAP allegations are associated with a significantly higher probability of settlement even after controlling for other potential determinants of outcome (Cutler et al. 2014). Similarly, Johnson et al. (2007) find that a restatement increases the likelihood of lawsuits and settlements. Table 3 shows the distribution of GAAP lawsuits in my sample by two-digit SIC industry and year. While some industries clearly attract more litigation than others and individual industries sometime experience spikes in certain years, lawsuits are spread over a wide variety of industries and occur relatively evenly over time.

Review of Prior Literature

While prior literature provides convincing evidence that improper accounting behavior can be an important determinant of the cases that are brought to court and the cases that settle, we know less about how litigation affects subsequent accounting behavior. Jennings, Kedia, and Rajgopal (2014) provide the most relevant evidence. In a study examining the effectiveness of SEC enforcement actions on the earnings quality of peer firms, they show that private lawsuits are actually more effective than SEC actions at increasing earnings quality in terms of abnormal accruals, conservatism, and informativeness. As they are primarily interested in deterrence effects, they do not study changes in the sued firms themselves. They also exclude non-GAAP

¹ I note that there appears to be a reverse in the trend in the final years of Table 1, as 2010 and 2011 contain a markedly lower percentage of GAAP lawsuits. This reversal appears to be a temporary blip, however, as Cornerstone Research reports that 45 cases with accounting allegations were ultimately reported in 2012, 47 in 2013, and 69 in 2014. In addition, the 2014 cases with accounting allegations constituted 70 percent of all the cases that settled and 85 percent of settlement dollars. (Cornerstone Research, 2015).

lawsuits from their sample, and do not consider the outcome of the lawsuits. Rogers and Van Buskirk (2009) study voluntary disclosure changes among all sued firms and show that litigation can change their subsequent behavior, finding a decrease in the quantity and quality of voluntary disclosure relative to non-sued firms. It is not clear whether or how these voluntary disclosure changes might be related to changes in accounting. Lennox and Li (2014) find that lawsuits with auditor defendants lead to a decreased probability that the auditor's other clients will have a future restatement, especially clients in the same audit office. Cheng, Huang, Li, and Lobo (2010) show that lawsuits can lead to increased board independence, especially when an institutional investor served as lead plaintiff.

Other studies link *ex ante* litigation risk to financial reporting behavior. Hopkins (2012) shows that an exogenous decrease in litigation risk for a subset of firms was followed by increased discretionary revenues and a greater likelihood of restatements. Conversely, Alam and Petruska (2012) show that a temporary increase in litigation risk was accompanied by a temporary increase in conservatism. Similarly, Qiang (2007) finds that conservatism is significantly greater for firms with higher litigation risk. Cao and Narayanamoorthy (2014) show that Director and Officer (D&O) liability insurance premiums are higher for firms with restatements or low quality earnings. These studies support a prediction that conservatism and earnings quality should increase after lawsuits.

Similar to my study, Donelson, McInnis, and Mergenthaler (2012a) classify the specific GAAP standards cited in a large sample of lawsuits involving alleged GAAP violations. Their purpose is to test whether rules-based or principles-based standards are more likely to lead to litigation and whether the type of standard affects the litigation outcome. They find that the accounting standards involved in litigation tend to be more principles-based, but they find no results with respect to the outcome of litigation. While they do not directly disclose the frequency of different GAAP allegations, they do provide unranked lists of the ten most commonly

appearing standards in different subsamples, and their lists are consistent with my findings below. While Donelson et al. (2012a) shows how accounting standards matter in what suits are brought to court, my focus is how firms' accounting choices change after a lawsuit. Indeed, this contrast applies to prior literature more generally. Prior literature often views private litigation as a fixed risk faced by firms, but I view litigation as an evolving and interactive process leading to continual incremental change in financial reporting.

Another branch of prior research provides evidence on characteristics of firms that are sued. Kellogg (1984) shows that litigation is more common when accounts are overstated rather than understated. Relatedly, there is evidence that conservatism reduces the likelihood of litigation. (Blunck, 2009; Ettredge, Huang, & Zhang 2012; Donelson, McInnis, Mergenthaler, & Yu, 2012b). Chalmers, Naiker, and Navissi (2012) find that the earnings quality of sued firms prior to lawsuits is significantly poorer than non-sued firms. If litigation is effective, then these studies suggest conservatism and earnings quality may increase following lawsuits. However, some tension arises from the model of Laux and Stocken (2012), which predicts that under some conditions, expected legal penalties may actually cause managers to increase misreporting.

Other studies involve the connection between restatements and litigation. As noted, restatements have been shown to be an important factor for plaintiffs in choosing which cases to pursue (Johnson, et al., 2007; Choi, et al., 2009). Palmrose and Scholz (2004) find that restatements involving recurring items or multiple accounts are more likely to lead to litigation, and Hennes, Leone, and Miller (2008) find that restatements that result from irregularities and not merely errors are more likely to result in lawsuits. There are also studies that examine the consequences of restatements, without distinguishing firms that experienced lawsuits. Ettredge, Huang, and Zhang (2013) find that restatement firms subsequently stop issuing forecasts or issue fewer forecasts, and forecasts issued are less precise. Wilson (2008) finds a loss of information content to earnings after a restatement, but shows that the information loss is temporary. Ettredge

et al. (2013) shows an increase in conservatism after restatements, but only when the restatement precipitates governance changes. Despite any consequences to firms who restate, Files, Sharp, and Thompson (2013) document that a large proportion of restatement firms restate again in the future.

CHAPTER III

HYPOTHESIS DEVELOPMENT

I theorize that the manner and extent of a manager's reaction to a lawsuit will be a function of a) the firm's "proximity" or similarity to the sued firm and b) the amount of new information provided by the lawsuit. I consider a non-sued firm to be proximate to a sued firm if it is in the same industry and size decile as the sued firm, or if it shares an auditor and geographic proximity with the sued firm. These are the firms which are most likely to pay attention to the lawsuit, and where mechanisms most likely exist to transmit information between firms. For example, when firms share an auditor, the auditor can take information learned in a lawsuit against one client and transmit it to other clients. For industry peers, information can be shared through mediums such as trade organizations, interlocking boards, etc. To capture the amount of new information in a lawsuit, I use the number of citations to the judge's opinion on the motion to dismiss. This is nearly always the most important and dispositive opinion in this type of case. If the decision is novel because it addresses a new fact situation or applies the law in a new way, it creates new precedent and should generate a greater number of citations. These are the cases theoretically most likely to cause revision or updating of managers' beliefs about what actions will or will not lead to litigation.

After each lawsuit observed, managers might react in several alternative ways. The simplest alternative is that firms could do nothing. If a lawsuit occurs in an industry that is dissimilar to the managers' own, then the managers can reasonably conclude that a similar financial reporting situation will not arise and lead to litigation in their own firm. Or, if there is no readily available mechanism to transmit the information in the lawsuit to the non-sued managers, they are unlikely to change their behavior. In addition, if the lawsuit itself does not provide much new information, for example if the circumstances and outcome of the lawsuit are very similar to prior litigation, then the managers have little reason to change their previously optimal behavior.

However, if the lawsuit is more proximate to the non-sued firm, and/or provides more new information, then it is more likely that managers will change their financial accounting and reporting behavior in some way. Findings of prior literature outlined above support this prediction. Most notably, Rogers and VanBuskik (2009) show evidence that sued firms change disclosure behavior after lawsuits and Jennings, et al. (2014) show that industry peers of firms sued for GAAP allegations exhibit changes in earnings properties. Given a prediction that firms will change their financial accounting behavior in response to lawsuits, there are still two different general possibilities for what form this change could take. In both cases, firms will act in ways designed to reduce the risk of facing litigation in the future. First, firms could respond directly to the allegations in the lawsuit. For example, if a lawsuit alleges that revenue was recognized prematurely, then firms might respond by recognizing revenue more slowly, or if a lawsuit alleges that a firm failed to recognize a goodwill impairment, firms might respond by recognizing impairments more quickly and more often in the future. This is the type of response that would be desirable from a policy perspective.

I predict that firms will respond directly to the allegations of the lawsuit when doing so will unambiguously reduce their litigation risk. Specifically, I predict that firms should respond directly to revenue recognition lawsuits by reducing discretionary revenues. If a firm faces litigation for an aggressive revenue recognition practice, and especially if a firm pays a significant settlement, that firm and its peer firms have a clear incentive to avoid similar types of revenue recognition practices in the future. Once a judge determines that a specific pattern of improper revenue recognition creates a strong inference of scienter, future managers who engage in similar behavior are inviting litigation. Managers may worry that more conservative revenue recognition will make it harder to meet earnings expectations, and an earnings miss could also increase litigation risk. However, managers have many different methods available to them to meet or beat expectations. As new case law makes aggressive revenue recognition comparatively

more expensive, they should be able to reduce discretionary revenues and shift towards other methods in order to unambiguously reduce litigation risk. This leads to my first hypothesis:

H1_A: Class action lawsuits alleging revenue recognition violations are associated with significantly lower discretionary revenues for sued firms and their industry and shared auditor peers.

It is difficult to predict precisely how firms will respond to asset impairment recognition lawsuits. They could respond directly by recognizing impairments in full as soon as they are likely. But paradoxically, this could actually increase litigation risk. Many firms are sued for failure to timely recognize an asset impairment only after they have actually recognized it. A large write-down triggers a stock price decline, and plaintiffs sue claiming that the impairment should have been recognized earlier. This is precisely the fact pattern that occurred in the Accredo Health example above. Therefore, quickly recognizing impairments may not unambiguously reduce litigation risk. A manager may rationally choose to delay the impairment in the hope that the situation improves or that some good news arises that he can pair with the write-down to soften the blow. An alternate strategy might be to recognize impairments in smaller increments over time in order to avoid sudden stock price drops. Because I do not have a clear prediction, I state my hypothesis in the null form.

H2₀: Class action lawsuits alleging failures to recognize asset impairments are not associated with changes in the reporting of negative special items for sued firms and their industry and shared auditor peers.

Rather than, or in addition to, responding directly to the allegations in a lawsuit, managers could take other actions designed to reduce litigation risk. These would presumably be actions that reduce the likelihood of large stock price drops, such as avoiding abrupt releases of negative news and striving to meet or beat analysts' expectations. Many lawsuits are triggered by a failure to meet earnings estimates, followed by a sharp stock price decline. As noted, plaintiffs generally require such a stock price decline so that they can demonstrate that investors suffered losses and that the losses were connected to the sued firm's disclosures. My sample shows the importance of earnings misses in triggering litigation. Approximately 59% of sued firms in the sample failed to meet analysts' estimates in the quarter of the lawsuit or one of the prior four quarters. For non-sued firms, there is an earnings miss over a similar time period only 21% of the time. Therefore, it is possible that managers respond to lawsuits by changing their propensity to meet or beat analysts' estimates. Since an earnings miss can trigger a lawsuit, managers may logically increase their efforts to meet or beat expectations. However, it is also possible that managers could decrease efforts to meet expectations since firms that routinely miss estimates may experience less severe stock price declines after each miss.

Because I do not have clear predictions about the direction of changes in the propensity to meet or beat analysts' forecasts, I state my hypotheses in the null form:

H3₀: Class action lawsuits alleging GAAP violations are not associated with the propensity of sued firms and their industry and shared auditor peers to meet or beat analyst expectations in the future.

If managers do continue or increase efforts to manage earnings in order to meet expectations, they may change the means by which they do so. Since private litigation is often focused on violations of GAAP, managers may shift away from accruals-based earnings

management towards real earnings management. Earnings management through real activities should theoretically involve less litigation risk. First, it does not necessarily mislead shareholders, so long as managers do not publicly lie about real earnings management activities, and therefore it is not illegal in terms of Rule 10b-5. Second, even if some form of improper real earnings management occurred, it would be difficult for plaintiffs to detect and allege. Cohen, et al. (2008) show that in another setting, the passage of Sarbanes-Oxley, when accruals-based earnings management became relatively more costly, firms shifted towards management through real activities. I expect private litigation targeting GAAP violations to have a similar effect. Accordingly, I predict that GAAP lawsuits will increase the real earnings management of sued firms and their peers.

H4_A: Class action lawsuits alleging GAAP violations are associated with a significant increase in real earnings management by sued firms and their industry and shared auditor peers.

If managers make financial accounting and reporting changes in an effort to reduce litigation risk, then it is logical to ask whether these efforts are successful. Plaintiffs have a much greater ability to succeed in Rule 10b-5 class actions when there are sudden stock price declines that can be tied to managers' disclosures or other financial reporting events, so successful reduction of litigation risk should lower the likelihood of a sharp stock price drop. To measure the likelihood of a large stock price drop, I use stock return volatility, the negative skewness of stock returns, and the size of the minimum 1-day return each quarter. If a manager takes actions to successfully reduce litigation risk, then I expect reduced stock return volatility, less negatively-skewed stock returns, and less severe one-day stock price declines. Each new lawsuit may update managers' beliefs about a) the likelihood of future litigation and b) how judges will weigh stock return behavior in making key decisions. This new information may justify any costs of taking

actions to better manage the firm's stock price movements. For example, only last year the Supreme Court resolved confusion and disagreement as to the role of stock price patterns when deciding whether to allow cases to proceed as class actions, providing increased incentives for managers to carefully manage stock price movements (*Halliburton Co. v. Erica P. John Fund, Inc.*, 2014).² Still, it is not clear that new cases will uniformly cause managers to increase litigation risk-reduction efforts since a new case can cause managers to revise their expectations about the probability of litigation either upwards or downwards. In addition, other actions that managers may take in response to litigation, such as changes in revenue recognition or special item reporting, could have indirect effects on the firm's stock price. Therefore I state a hypothesis in the null form:

H5₀: Stock return volatility, stock return skewness, and the size of minimum 1-day stock returns will not be significantly different following litigation for sued firms and their industry and shared auditor peers.

It is also likely that any associated changes observed following litigation can depend on the outcome of lawsuits. If a lawsuit is filed but later dismissed, managers may feel that they can engage in similar behavior in the future because plaintiffs are unlikely to attempt another lawsuit based on the losing fact pattern. On the other hand, a dismissed lawsuit may provoke extra fear within managers since they now see that a firm may face litigation even when it has not necessarily done anything wrong.

² Early in litigation process, a court must decide whether to "certify a class" or allow all potential plaintiffs to be included in one large lawsuit, rather than many smaller ones. To succeed, plaintiffs must show, among other things, that there is sufficient commonality across all class members on a number of key issues, one of which is reliance. Traditionally, courts have essentially waived the reliance requirement if the issuer's shares are traded on an efficient market, since investors are presumed to rely on the integrity of the market price, which should incorporate all material statements by managers. However, in *Halliburton II*, the Supreme Court held that defendants may rebut the presumption of reliance at the class certification stage by showing that their statements had no stock price impact.

If a lawsuit is not dismissed, but instead results in a substantial settlement paid to the plaintiffs, managers may similarly be more or less likely to make financial accounting changes in the future. A large settlement is an objectively worse outcome for a sued firm than having the case dismissed, so settled lawsuits may be more salient to managers of the sued firm and peer firms. More importantly, when a judge decides that a particular fact pattern constitutes a strong inference of scienter, plaintiffs may be more vigilant for similar situations in the future, and managers will have strong incentives to avoid such behavior. Alternatively, managers may believe that settlements result from outlier firms behaving egregiously and fraudulently, and so they could make fewer changes since they already eschew fraudulent behavior.

Another possibility is that there are no differential effects based on outcome. Managers may view outcomes as idiosyncratic, unpredictable decisions of judges. In addition, all or part of a settlement may be paid by an insurance provider rather than out of managers' pockets, so the differential impact of settlements on managers' behavior could be minimal.

Accordingly, I state my hypothesis related to outcome in the null:

H₀6: The outcome of class action lawsuits alleging GAAP violations does not have a significant differential effect on any observed effects for sued firms and their industry and shared auditor peers.

Finally, as discussed above, managers should react more to lawsuits when they provide more new information. A lawsuit will provide the most new information when it deals with a previously unaddressed fact pattern or requires interpretation of a particular area of law for the first time. These novel cases should generally result in judicial opinions that are cited more often by later judges and practitioners in their own opinions and court documents. Therefore, I predict that more highly-cited cases will result in stronger reactions:

H7_A: Any observed effects related to class action lawsuits alleging GAAP violations will be increasing in the number of subsequent citations of that lawsuit's judicial opinion(s).

CHAPTER IV
EMPIRICAL DESIGN

Data and Sample

I obtain data on securities class actions since 1983 from the Securities Class Action Service (SCAS) by Institutional Shareholder Services. This dataset contains a variable, *GAAP_YN*, indicating whether the lawsuit contains allegations of GAAP violations. To classify the specific GAAP allegation in each case, I obtain the lawsuit complaint from the Stanford Securities Class Action Clearinghouse (SCAC), and search the allegations. Due to the time-intensive nature of this step, I limit the sample to lawsuits filed within the ten-year period 1996-2005. This results in 395 class actions with GAAP allegations. Of these, 32 do not have a complaint available in SCAC, and my examination of complaints reveals that another 39 do not actually contain GAAP allegations. There are 83 cases where no specific GAAP standard is cited, but I still attempt to classify the allegations if a GAAP violation is sufficiently articulated.

Table 4 summarizes my classification of GAAP allegations. Rather than classify solely by specific standards within GAAP, I organize the allegations into categories where possible. The largest category consists of improper revenue recognition, with 182 cases. The next largest category is 153 cases with allegations that the firm violated SFAS 5 by failing to accrue an adequate contingent liability/loss³. However, the majority of these cases occur in conjunction with a revenue recognition violation. For example, firms alleged to have improperly booked revenue are often also accused of failing to accrue adequate losses for uncollectible accounts receivable or sales returns sure to result from the questionable revenues. The next category consists of 81 cases where the firm allegedly failed to recognize an impairment and write-down assets in a timely manner. Frequently, these lawsuits result after the firm has made such an

³ Note that the number of cases listed in SFAS 5 subcategories sums to more than 153 because some cases contain multiple allegations.

impairment, and the plaintiffs allege that the sued managers knew the asset was impaired much earlier and improperly delayed taking action. The largest group within this category relate to failure to report inventory at lower of cost or market, and another large group relates to the impairment of goodwill or other intangible assets. Beyond these large categories, Table 4 lists a variety of smaller groups. A common thread through the large majority of cases is that firms attempt to increase reported net income in order to meet earnings expectations, either by increasing revenues or decreasing expenses.

Donelson et al. (2012a) also classify the GAAP provisions cited in private litigation and the provisions that they report are consistent with Table 4. Bonner, Palmrose and Young (1998) classify the categories of accounting fraud in companies with SEC Accounting and Auditing Enforcement Releases. While their categorization scheme does not map directly to mine, the categories appear largely consistent with what I find in the private litigation sample.

It is interesting to note that most private lawsuits tend to concentrate on a few small areas of GAAP. This could indicate that these areas are the most problematic and are violated the most, and standard-setters and enforcers should pay careful attention to these areas. It could also mean that these are the areas that best enable plaintiffs' attorneys to successfully win settlements. The sample of SEC actions in Bonner et al. (1998) contains similar categories as in my sample, but the cases appear somewhat less skewed towards the largest few areas. Private plaintiffs require violations that can be directly linked to material movements in stock price, and that they can identify using publicly available information. If most areas of GAAP do not fit these requirements, they may be relatively under-enforced.

For my main tests, I focus on two of the largest three categories that provide a sufficient number of cases for study, improper revenue recognition and failure to recognize asset impairments. As noted, I do not use the improper contingent reserves allegations because they are too difficult to disentangle from, and are usually derivative of, revenue recognition allegations. I

also run tests focusing on the entire group of GAAP cases, and in all tests I also include all non-GAAP cases for comparison.

To construct my main sample, I merge the lawsuit data with all quarterly Compustat data over the sample period. I use quarterly data since my dependent variables generally require it. I am interested in changes related to the lawsuit, so I create indicator variables based on time periods before a lawsuit is filed and after a lawsuit is resolved. *Pre_sued* equals 1 for a sued firm in the eight quarters prior to the filing of a lawsuit, *Post_settle* equals 1 in the eight quarters after a settlement is first announced, and *Post_dismiss* equals 1 in the eight quarters after a lawsuit is dismissed. I include very small, “nuisance” settlements, which I define as less than or equal to 0.5 percent of market capitalization, in the dismissal category.

Similarly, I create analogous variables *Pre_ind_sued*, *Post_ind_settle*, and *Post_ind_dismiss* for non-sued firms in the same industry, measured as two-digit SIC code, and market decile as a sued firm, and *Pre_aud_sued*, *Post_aud_settle*, and *Post_aud_dismiss* for all non-sued firms who share the same auditor in the relevant quarter(s). Given the relatively small number of auditing firms, I would not have sufficient variation in my sample without narrowing the matching procedure, since some client of each big N auditor is sued in most years. Therefore I also require the shared auditor peer firm to have some geographic proximity to the sued firm. A geographically proximate firm is also more likely to share an audit office with the sued firm, so transmission of information learned through litigation should be more likely. To proxy for geographic proximity I require the shared auditor peer firm to be headquartered in the same federal judicial circuit as the sued firm. The federal judicial circuit map conveniently divides the United States into 11 regions, similar to U.S. Census regions.

I next create similar indicator variables related to the attributes and allegations of the lawsuits. *Pre_GAAP_settle* and *Pre_GAAP_dismiss* are equal to 1 in the eight quarters before a firm is sued for alleged GAAP violations, and *Post_GAAP_settle* and *Post_GAAP_dismiss* are

equal to 1 in the eight quarters after the lawsuit is settled or dismissed, respectively. For specific revenue recognition and asset impairment write-down allegations, the analogous variables are *Pre_revrec_suit*, *Pre_writedown_suit*, etc. Each of these variables also has industry and shared auditor peer equivalents.

I also create indicator variables capturing when the auditor is included as a defendant in the lawsuit, with *Pre_auditor_def* equal to 1 in the eight quarters prior to a lawsuit and *Post_auditor_def* equal to one in the eight quarters following the resolution of the case. I include this auditor variable for two reasons. First, it signals that the alleged GAAP violations were substantial and serious, and second, auditors who are sued may have extra incentives to change the future behavior of their clients. The inclusion of an auditor is relatively rare. Of the 581 total lawsuits with sufficient data for my tests, only 34 include an audit firm as a defendant, and often the auditor may be dismissed from the case early. Two major factors probably contribute to the dearth of auditors during the sample period. First, a 1994 Supreme Court decision made it considerably more difficult to find auditors liable for Rule 10b-5 violations, holding that plaintiffs must show that auditors did not merely aid and abet the violation by managers, but actually made actionable statements or omissions themselves, with scienter (*Central Bank of Denver, N.A. v. First Interstate Bank of Denver*). In addition, after the PSLRA, auditors in many cases are no longer jointly and severally liable for the entire damages amount, but are only responsible for the amount that they proportionately caused. When an auditor is sued, though, the lawsuits overwhelmingly settle. Of the 34 lawsuits with auditor defendants in the sample, only 4 were dismissed⁴. Many of the auditor cases in the sample are clustered around the Enron-era large accounting scandals in the late 1990s and early 2000s. To allege scienter for auditors, plaintiffs

⁴ In my dataset, a case is considered settled if any defendant agrees to a settlement, so it is quite possible and even likely that in the 30 auditor cases that settled, the auditors themselves may have been dismissed from the case.

may use facts such as non-audit consulting services provided by the audit firm that created a conflict of interest, or obvious red flags of which the auditor must have been aware.

To measure the number of citations to a judicial decision in each GAAP lawsuit, I use the *Shepard's* service of *LexisNexis*. For each case, I count the number of citations in future judicial opinions, including any appellate decisions, as well as court documents such as motions to dismiss. I scale the number of citations by the number of years passed since the lawsuit was filed, so that there is no bias towards older cases which have had more time to collect citations. I then take the natural log of the sum of the citations per year for each case to create the variables *Cites*, *Ind_cites*, and *Aud_cites* associated with each case. In my tests, I interact these citation variables with the GAAP, revenue recognition, and write-down variables.

Dependent Variables

To test for changes related to revenue recognition, I use the Stubben (2010) measure of discretionary revenues. While there are many competing discretionary accrual measures available, discretionary revenues is most directly suited to the type of behavior commonly encountered in sued firms. This measure is designed to capture how quickly a firm recognizes revenue relative to its peers. In multiple tests, Stubben (2010) shows that his measure of discretionary revenues performs better than the Dechow-Dichev measure of discretionary accruals or the modified Jones model at detecting revenue manipulation. Discretionary revenues, *DiscRev*, is defined as the residual from the following regression, estimated by industry and year:

$$(AR_{i,q} + AR_{i,q-1} + AR_{i,q-2} + AR_{i,q-3}) - (AR_{i,q-4} + AR_{i,q-5} + AR_{i,q-6} + AR_{i,q-7}) = \alpha + \beta 1 (REV_{i,q} - REV_{i,q-4}) + \beta 2 [(REV_{i,q-1} + REV_{i,q-2} + REV_{i,q-3}) - (REV_{i,q-5} + REV_{i,q-6} + REV_{i,q-7})] + \varepsilon$$

Where AR is net accounts receivable of firm i in quarter q as measured from the statement of cash flows, and revenue is total revenues of firm i in quarter q.

Since this method models receivables, the accrual most directly related to revenue, it contains less noise and bias than models of aggregate accruals. The model takes a conservative approach by modeling receivables as a function of reported revenues and not cash revenues, which should understate rather than overstate the estimate of discretionary revenues. Finally, by separating the revenue components of the model into the change in revenues from the first three quarters and the change in revenue in the fourth quarter, the model is less likely to under- or overestimate discretion. This is because revenues reported in the later part of the year are less likely to be collected in cash by the end of the year, even if they are completely legitimate, and firms with abnormally high or low fourth quarter revenue could therefore have biased estimates of discretionary revenue.

To test for changes related to impairments/write-offs, I examine the probability of reporting negative special items (NSPI) each quarter, as well as the size of NSPI reported scaled by income before special items. For each firm-quarter in my sample, *NSPI_YN* equals 1 if the firm reports a negative special item, and *NSPI_size* equals the amount of the negative special item divided by total income before extraordinary items, and multiplied by negative one so that a larger coefficient will represent a larger NSPI in terms of absolute magnitude. In *NSPI_size* tests, I only include observations where nonzero NSPI was reported so that the results are more distinct from the propensity to report NSPI tests using *NSPI_YN*.

To measure firms' propensity to meet or beat analysts' consensus earnings forecasts, I create an indicator variable, *LMB_YN* equal to 1 if a firm's reported earnings for the quarter exceed by more than \$0.03 the average analyst forecast as reported in I/B/E/S, and *SMB_YN* equal to 1 if a firm's reported earnings for the quarter exceed the average analyst forecast by \$0.03 or less. Consistently meeting or beating by a few cents is often used by prior literature as a proxy indicating a greater likelihood of earnings management. (e.g. Matsumoto, 2002; Burgstahler & Eames, 2006).

For tests of real earnings management, I use four measures based on Roychowdury (2006) and Cohen, Dey, and Lys (2008). The first is a measure of abnormal cash flows from operations, *Abnorm_CFO*. This is designed to capture firms who accelerate the timing of sales through incentives to buyers such as price discounts and lenient credit terms, increasing current period earnings but decreasing current CFO. Therefore firms with earnings managed by this method should have a significantly negative coefficient on *Abnorm_CFO*. This measure is calculated by subtracting the actual operating cash flows (CFO) from the expected CFO calculated using the estimated coefficients from the following regression, run by industry and year:

$$CFO_{it}/Assets_{i,t-1} = k_{1t} (I/Assets_{i,t-1}) + k_2(Sales_{it}/Assets_{i,t-1}) + k_3(\Delta Sales_{it}/Assets_{i,t-1}) + \varepsilon_{it}.$$

The next measure is abnormal production costs, *Abnorm_prod*. Managers can increase earnings by producing more units than necessary, spreading fixed costs over a greater number of units and therefore lowering the cost per unit. While decreasing COGS and increasing operating margins, this strategy leads to higher overall production costs and lower cash flows from operations. Therefore firms using the method of real earnings management would be expected to have a significantly positive coefficient on *Abnorm_prod*. Production costs (*Prod*) are defined as the sum of COGS plus the change in inventories, the normal level is predicted from the estimated coefficients in the following regression, run by industry and year, and abnormal equals actual minus expected:

$$Prod_{it}/Assets_{i,t-1} = k_{1t} (I/Assets_{i,t-1}) + k_2(Sales_{it}/Assets_{i,t-1}) + k_3(\Delta Sales_{it}/Assets_{i,t-1}) + k_3(\Delta Sales_{i,t-1}/Assets_{i,t-1}) + \varepsilon_{it}.$$

Next, I use a measure of abnormal discretionary expenses, *Abnorm_disc_exp*. This method of real earnings management is intuitive, as managers can reduce discretionary expenses in order to increase current period earnings and cash flows, at the potential cost of reduced long term earnings and cash flows. Therefore firms managing earnings with this method should have a

significantly negative value of *Abnorm_disc_exp*. This measure is calculated as the actual level of discretionary expenses (*Disc_exp*), defined as the sum of R&D expense and SG&A expense, minus the expected level of discretionary expense predicted using the estimated coefficients from the following regression, run by industry and year:

$$Disc_exp_{it}/Assets_{i,t-1} = k_{1t}(1/Assets_{i,t-1}) + k_2(Sales_{i,t-1}/Assets_{i,t-1}) + \varepsilon_{it}.$$

Finally, for tests of stock return characteristics, I use three different dependent variables derived from *CRSP* daily stock return data. I measure the standard deviation of stock returns each quarter, *Std_ret*, the skewness of stock returns each quarter, *Skew_ret*, and the minimum daily return each quarter, *Min_ret*. I note that *Min_ret* is measured as the actual minimum one-day return, so a positive coefficient would be desirable from a litigation risk-reduction perspective, indicating that the largest one day stock price decline was less negative relative to the period before the lawsuit.

Regression Models

To test for changes in discretionary revenues and probability and size of NSPI, I run regressions of the following form:

$$\begin{aligned} DepVar_{i,q} = & \beta_1 + \beta_2 Pre_settle_{i,q} + \beta_3 Post_Settle_{i,q} + \beta_4 Pre_dismiss_{i,q} + \beta_5 Post_dismiss_{i,q} + \\ & \beta_6 Pre_GAAP_settle_{i,q} + \beta_7 Post_GAAP_settle_{i,q} + \beta_8 Pre_GAAP_dismiss_{i,q} + \\ & \beta_9 Post_GAAP_dismiss_{i,q} + \beta_{10} Pre_allegation_settle_{i,q} + \beta_{11} Post_allegation_settle_{i,q} + \\ & \beta_{12} Pre_allegation_dismiss_{i,q} + \beta_{13} Post_allegation_dismiss_{i,q} + \beta_{14} Pre_GAAP_settle_{i,q} * Cites + \\ & \beta_{15} Post_GAAP_settle_{i,q} * Cites + \beta_{16} Pre_GAAP_dismiss_{i,q} * Cites + \beta_{17} Post_GAAP_dismiss_{i,q} \\ & * Cites + \beta_{18} Pre_allegation_settle_{i,q} * Cites + \beta_{19} Post_allegation_settle_{i,q} * Cites + \\ & \beta_{20} Pre_allegation_dismiss_{i,q} * Cites + \beta_{21} Post_allegation_dismiss_{i,q} * Cites + \beta_{22} Pre_auditor_def_{i,q} \\ & + \beta_{23} Post_auditor_def_{i,q} + \sum \gamma_k Controls_{k,i,q} + Industry_FE + Circuit_FE + Year_FE + \varepsilon_{i,q} \end{aligned}$$

where “*allegation*” refers to the specific GAAP allegation relevant to each regression, *revrec* or *writedown*. For revenue recognition tests, I run OLS regressions with *DiscRev* as the dependent variable. For asset impairment tests, I run logit regressions with *NSPI_YN* as the dependent variable and OLS regressions with *NSPI_size* as the dependent variable.

For tests of changes in propensity to meet or beat analysts’ forecasts, tests of real earnings management, and tests of stock return attributes, I run similar logit or OLS regressions, but without specific allegation variables:

$$\begin{aligned}
 DepVar_{i,q} = & \beta_1 + \beta_2 Pre_settle_{i,q} + \beta_3 Post_Settle_{i,q} + \beta_4 Pre_dismiss_{i,q} + \beta_5 Post_dismiss_{i,q} + \\
 & \beta_6 Pre_GAAP_settle_{i,q} + \beta_7 Post_GAAP_settle_{i,q} + \beta_8 Pre_GAAP_dismiss_{i,q} + \\
 & \beta_9 Post_GAAP_dismiss_{i,q} + \beta_{10} Pre_GAAP_settle_{i,q} * Cites + \beta_{11} Post_GAAP_settle_{i,q} * Cites + \\
 & \beta_{12} Pre_GAAP_dismiss_{i,q} * Cites + \beta_{13} Post_GAAP_dismiss_{i,q} * Cites + \beta_{14} Pre_auditor_def_{i,q} + \\
 & \beta_{15} Post_auditor_def_{i,q} + \sum \gamma_k Controls_{k,i,q} + Industry_FE + Circuit_FE + Year_FE + \varepsilon_{i,q}
 \end{aligned}$$

where the dependent variable is *LMB_YN*, *SMB_YN*, *Abnorm_CFO*, *Abnorm_Prod*, *Abnorm_disc_exp*, *Std_ret*, *Ret_skewness*, or *Min_ret*.

In all tests, *Industry_FE* represents industry fixed effects, *Circuit_FE* represents judicial circuit fixed effects, and *Year_FE* represents year fixed effects. Additionally, I cluster standard errors by two-digit SIC code and report robust standard errors. The same regressions are also performed with the equivalent industry and shared auditor peer variables.

Controls represents a vector of control variables following similar regressions in prior literature. *ROA* is the return on assets of firm *i* in quarter *q*, measured as income before extraordinary items in quarter *q* divided by total assets in quarter *q-1*. *Salesgrowth* is sales in quarter *q* divided by sales in quarter *q-4*, scaled by total assets in quarter *q*. *MTB* is market value

of equity scaled by book value of equity of firm i in quarter q , and $Size$ is the natural log of market value of equity of firm i in quarter q . Age is the number of years that firm i has appeared in Compustat as of quarter q . $Leverage$ is defined as total liabilities divided by total assets of firm i in quarter q . $Goodwill$ is the amount of goodwill reported on the balance sheet by firm i in quarter q , scaled by total assets, and $Num_Analyst$, the number of I/B/E/S analysts providing estimates for the firm. For tests of stock return characteristics, I include controls based on Bushee and Noe (2000): the standard deviation of the value-weighted market returns, Std_ret_mkt , the average trading volume for the firm scaled by shares outstanding, $AveVol$, dividends paid each quarter scaled by market value of equity, DP , and the ratio of income before extraordinary items to market value of equity, EP . Table 5 presents variable definitions for key variables.

I am primarily interested in changes resulting from litigation. Therefore, after running each regression, I perform F-tests to see whether pre- and post-litigation coefficients are significantly different from one another. My tables present the difference in the coefficients, calculated as post minus pre, along with the P-value from the F-test of whether post-pre=0.

CHAPTER V

EMPIRICAL RESULTS

Discretionary Revenue Tests

Table 6 presents results from regressions of discretionary revenues, *DiscRev*.

Interestingly, with respect to sued firms themselves, I find only very limited results. Although the sued firms should have the most egregious examples of aggressive revenue recognition before the onset of litigation, I only observe significant evidence of reduced discretionary revenues after dismissed lawsuits, with no significant incremental effects for lawsuits with revenue recognition or other GAAP allegations. It could be that by the time a lawsuit is filed, the aggressive positions of the sued firms have already started to unwind or unravel, so that the pre- and post-periods in my tests are not adequately capturing any changes that do occur.

With industry peers of sued firms, however, I generally observe a significant decline in discretionary revenues surrounding lawsuits. This decline is associated with all lawsuits, regardless of the allegations, but is significantly incrementally stronger for revenue recognition lawsuits that result in settlements. General GAAP allegation cases that settle and result in a greater number of citations also have a significant incremental negative effect on industry peers' discretionary revenues. This evidence indicates that managers pay attention to litigation against peers in their industry, including the specific allegations of each lawsuit, and change their behavior accordingly. For shared auditor peers, though, I find almost no significant reductions in discretionary revenues following lawsuits. Perhaps revenue recognition behavior targeted in lawsuits tends to be industry-specific, and therefore primarily affects only industry-wide behavior. For example, a case alleging improper revenue recognition on a long-term construction contract is less likely to change the behavior of firms in the pharmaceutical or retail sectors.

While industry peers generally display reduced discretionary revenues in response to litigation, perhaps the most interesting finding is that for highly-cited GAAP cases that are

dismissed, and highly cited revenue recognition cases that settle, there is a significant *positive* incremental effect on discretionary revenues of industry peers. It may be that in these cases, a judicial opinion can create a form of safe harbor for firms going forward. An opinion is likely to be highly cited when it deals with a fact pattern or area of law not previously addressed. When discussing and deciding the case, the judges further define the contours of what will or won't result survive dismissal, and therefore provide more certainty to managers going forward.

Consider the earlier example of Accredo Health, Inc. In that case, the judge found that the allegations that managers knowingly failed to write down doubtful accounts receivable were sufficient to create a strong inference of scienter and survive dismissal. However, the judge also indicated that these allegations were only sufficient when combined with suspicious insider stock sales by the defendant managers. Other managers observing the case might conclude that they could engage in similar accounting behavior so long as they avoided suspicious stock sales.

Negative Special Item Tests

Table 7 presents results from regressions of the likelihood and size of NSPI before and after private lawsuits. Note that *NSPI_size* has been multiplied by negative one so that a negative coefficient means that negative special items reported after a lawsuit are smaller in terms of absolute value. For sued firms, I only observe significant results in response to specific asset impairment allegations, and the effect depends strongly on the outcome of the case. Settlements in asset impairment cases are related to larger NSPI reported in the future, while the effect is opposite for dismissed cases. One interpretation of these results is that when litigation results in a settlement, it has a deterrent effect that causes the firm to be more likely to recognize an impairment in the future. But when the lawsuit is dismissed, the firm's managers perceive that

recognizing an impairment can trigger litigation, even if they have not actually done anything wrong. Therefore they become less likely to recognize large NSPI in the future.

For industry peers of sued firms, I observe significant changes in NSPI following lawsuits, but in varying directions that are not easy to interpret. For asset impairment recognition lawsuits, I find no significant incremental effects, regardless of whether a case is highly cited. Apparently peer firms do not pay close attention to such allegations or do not perceive them to apply beyond the sued firm. For lawsuits without GAAP allegations that are dismissed, I find that industry peers more likely to report NSPI, but in smaller amounts. Perhaps dismissed lawsuits raise fears about facing meritless litigation, and firms therefore avoid writing down assets for fear of triggering a lawsuit. But paradoxically, after a lawsuit with GAAP allegations is dismissed, industry peers tend to recognize larger NSPI. When an auditor is included as a defendant, the results are opposite, with industry peers becoming less likely to report NSPI but reporting in larger amounts when they do.

For peer firms with shared auditors in the same geographic region, the only significant result associated with specific asset impairment allegations is a significant increase in the likelihood of reporting NSPI following dismissed cases that are highly cited. For general GAAP allegation lawsuits which result in settlements, I find a marginally significant increase in the likelihood of reporting NSPI, but the size of NSPI decreases when the settled GAAP case is more highly cited. Thus, there is a general pattern following GAAP settlements of a tendency to report NSPI more often but in smaller amounts. As noted, this would be consistent with a strategy to reduce litigation risk by avoiding large write-downs. Finally, as with industry peers, when an auditor is included as a defendant, shared auditor peers become significantly less likely to report NSPI.

My results indicate that litigation can induce significant changes in NSPI reporting, but changes occur in varying directions that are sometimes difficult to interpret. One issue may be

that a manager responding to an asset impairment recognition lawsuit may make changes that do not show up in special items. For example, a firm with impaired inventory could recognize the impairment in cost of goods sold, rather than as a separate line item. Although further study is required to understand the direction of changes I observe, the results again show the importance of private legal actors in shaping how GAAP is implemented.

Meeting or Beating Analysts' Forecasts Tests

Table 8 shows results of logit regressions of the likelihood of meeting or beating analyst's forecasts with a side-by-side comparison of "large" beating by greater than \$0.03, and "small" meeting or beating by \$0.03 or less. With respect to sued firms, results are mixed. Lawsuits with GAAP allegations are associated with a significant increase in beating analysts' estimates by a large margin, especially following settlements. In contrast, for lawsuits without GAAP allegations, sued firms become significantly less likely to exceed expectations following cases that settle, but show a marginally significant increase in small meeting or beating after dismissals. For lawsuits with auditor defendants, there is a significant shift away from small meeting or beating towards beating by a larger margin.

For industry peers of sued firms, GAAP lawsuits increase the likelihood of large meeting or beating, while simultaneously decreasing the likelihood of small meeting or beating. For lawsuits without GAAP allegations, there are no significant effects. And as before, I observe opposite effects for lawsuits with an auditor included as a defendant, with firms significantly more likely to just meet analyst expectations.

For shared auditor peers, I observe a similar general pattern of an increasing in beating by a large margin and a decrease in meeting or beating by a small margin. But in contrast to industry peers, cases without GAAP allegations have a significant impact, and the number of citations is

generally insignificant. And once again, results when the auditor is included as a defendant run in the opposite direction.

As with results in the NSPI reporting tests, the results here show litigation inducing significant changes in manager behavior, but in varying directions. In general, besides the relatively small number of auditor defendant cases, litigation appears to decrease the likelihood of meeting or beating by a small margin. This is not necessarily consistent with a reduction in earnings management, though, as I also observe an increase in the likelihood of meeting by larger margins. Perhaps this indicates that managers are reducing the quality of their guidance to analysts, and/or providing excessively negative guidance to ensure that analysts' expectations are sufficiently easy to surpass. This is consistent with the results of Rogers and Van Buskirk (2009) who find that sued firms reduce the quality and quantity of their voluntary disclosure, including management guidance, following lawsuits. If this means that the market is less informed, then my results may hint at a negative side effect of private securities litigation.

Real Earnings Management Tests

If sued firms and their peers are in at least some cases reducing aggressive accounting behavior in response to litigation, but also sometimes maintaining or increasing their tendency to meet earnings targets, then a logical next question is by what means they are continuing to manage earnings. When managers observe that aggressive accounting practices can increase the likelihood of lawsuits and settlements, they may rationally shift to earnings management through real activities. Indeed, Cohen et al. (2008) find that after Sarbanes-Oxley cracked down on accounting improprieties, there was a shift away from accruals-based earnings management and

towards real earnings management. I test for a similar pattern following private litigation targeting GAAP violations.

Table 9 presents results of regressions of measures of real earnings management. For sued firms themselves, there is significant evidence of increased real earnings management following highly-cited GAAP settlements and auditor litigation, in terms of abnormal CFO and abnormal production costs. But abnormal discretionary expenses actually increase, inconsistent with real earnings management.

For peer firms, I also observe significant increases in real earnings management in many cases. Following GAAP cases, and especially when highly-cited, I observe evidence of real earnings management in terms of abnormally low CFO and discretionary expenses. Interestingly, I frequently observe a significant reduction in abnormal production costs, which is consistent with decreased rather than increased real earnings management. Overall, the evidence here indicates that private litigation may lead firms to increase efforts to manage earnings through real activities, an interesting and unintended effect.

Stock Return Characteristic Tests

Table 10 presents results of regressions of stock return volatility, stock return skewness, and minimum 1-day returns. The results are mixed, with significant changes in stock return characteristics consistent with both increased and decreased litigation risk. For sued firms, lawsuits without GAAP allegations are associated with the most risk-reducing changes, with significantly lower return volatility and significantly more positive (i.e. less negative) minimum

1-day returns. Cases with GAAP allegations that settle are associated with more positively skewed returns, but also higher volatility.

For industry peers, GAAP litigation is associated with lower volatility and less negative minimum 1-day returns, but the incremental effects are opposite for highly-cited settlements. Also, non-GAAP lawsuits, highly-cited GAAP dismissals, and auditor lawsuits are all associated with significantly more negatively skewed returns. For shared auditor peers, significant results are almost uniformly in the direction of higher litigation risk, with more return volatility and more negative minimum 1-day returns. The exception is auditor defendant lawsuits, where I observe lower volatility and less negative minimum 1-day returns for shared auditor peers after lawsuits.

What is clear from these tests is that private lawsuits are associated with significant shockwaves that ripple through the stock returns of sued firms and their peers. Whatever changes managers may make in response to litigation, they appear to have significant stock market consequences. In cases where managers appear successful at lowering litigation risk by reducing volatility, negative skewness, and/or sharp 1-day returns, are shareholders unambiguously better off? On the one hand, they face less risk of losses associated with litigation, but it is also possible that earnings are less informative. This raises questions currently beyond the scope of this paper, but serves to highlight the potentially far-reaching impact of private securities litigation.

CHAPTER VI

CONCLUSION

I attempt measure the consequences of the increased trend of private litigation targeting alleged violations of GAAP. I find that private litigation has a significant and sometimes unexpected impact on sued firms and their industry and shared auditor peers. The largest category of GAAP allegations relates to revenue recognition, and firms often respond directly to these lawsuits. Generally, class action litigation leads firms to significantly reduce their discretionary revenue recognition, but some cases are actually associated with more aggressive revenue recognition by industry peers. The fact that the outcome of litigation can lead to such different effects highlights the important role of courts, which generally lack accounting expertise, in shaping accounting practices. With respect to another large category of GAAP allegations, improper asset impairment recognition, I find changes in sued firms differ sharply depending on lawsuit outcome, but that for peer firms there are few discernible changes associated with specific asset impairment allegations. But I do find some significant NSPI reporting changes in peer firms following other GAAP and non-GAAP lawsuits.

I find similarly unpredictable patterns related to other, less direct financial reporting changes after private litigation. Indeed, perhaps an important result of this study is that litigation and its consequences are unpredictable. First, I find both significant increases and decreases in the propensity to meet or beat analysts' expectations, but in general there is a shift away from meeting or beating by a few cents or less towards beating by larger margins. Second, I find that following litigation, firms often exhibit a shift towards real earnings management, which occurs most often through acceleration of sales and/or reduction of discretionary expenses. This is a rational means for managers to minimize litigation risk while still managing earnings, but it could involve long term costs for shareholders and does not necessarily further the goals of securities

regulators. And once again, results can be unpredictable, with real earnings management also decreasing in some instances.

Finally, I find that private litigation is associated with changes in stock return characteristics, specifically volatility, skewness, and minimum 1-day returns, but in different directions depending on the attributes and outcome of the case. While the exact interpretation is unclear, these results indicate that private litigation creates far-reaching disruptions in the financial reporting environment.

Overall, my results highlight that U.S. accounting standards exist within our complex legal system, which allows private actors to act as regulators, and these private actors have increasingly been interested in GAAP violations. This has a significant impact in how standards are implemented. Notably, private lawsuits tend to focus on a few areas of GAAP. This is a signal that these are important and contentious areas, but could also indicate that other areas of GAAP may be neglected in terms of enforcement. In any case, standard-setters should be particularly cognizant of the potential effects of private lawsuits when working in these areas.

Standard setters and practitioners should be aware that the judicial system operates from a perspective far different from the conceptual framework. Judges do not officially determine whether a GAAP provision has been violated or not, but instead care whether there has been an apparent violation of the law. Therefore plaintiffs focus on the ability to satisfy needed elements of their case, which generally requires a) a substantial stock price decline that can be tied to the accounting misbehavior, and b) some readily obtainable evidence that the managers acted intentionally. It is these factors that will determine which potential violations are brought to court and how the case fares. For their part, judges should think carefully about the perspective and objectives of standard-setters before creating precedent with far-reaching implications for GAAP.

In the realm of revenue recognition standards, the private enforcement regime appears to work relatively well, but my results suggest improvements may be needed in other areas. Since

asset impairment questions frequently generate legal controversy, with ambiguous results, there could be a need for clearer guidance to practitioners and managers in this area. For example, it is difficult for plaintiffs to know when goodwill should be impaired *ex ante*, and they may only be able to sue after an impairment has been recognized. This means both that enforcement happens too late and that managers could be deterred from recognizing the impairment at all. If firms were required to periodically disclose individual factors of the impairment decision, such as expected cash flows related to important assets, private litigants could act as better watchdogs.

These are complicated questions that would clearly involve important costs as well as benefits. The key point is that for standard setters to create the most effective accounting rules, they should keep in mind that private attorneys and non-accountant judges may be the most likely enforcers of those rules, and this enforcement can lead to far-reaching, unpredictable, and perhaps unintended consequences.

APPENDIX

TABLES

Table 1

GAAP Lawsuits by Year

	year	GAAP	Non-GAAP	Total	% GAAP
Pre-PSLRA	1983	0	2	2	0.00
	1984	1	3	4	0.25
	1985	0	3	3	0.00
	1986	0	2	2	0.00
	1987	0	1	1	0.00
	1988	0	6	6	0.00
	1989	1	9	10	0.10
	1990	3	11	14	0.21
	1991	3	8	11	0.27
	1992	7	12	19	0.37
	1993	5	18	23	0.22
	1994	22	39	61	0.36
	1995	23	42	65	0.35
	Post-PSLRA	1996	29	15	44
1997		40	23	63	0.63
1998		57	38	95	0.60
1999		58	41	99	0.59
2000		67	31	98	0.68
2001		51	31	82	0.62
2002		59	35	94	0.63
2003		59	44	103	0.57
2004		85	44	129	0.66
2005		65	29	94	0.69
2006		43	21	64	0.67
2007		47	46	93	0.51
2008		45	38	83	0.54
2009		31	37	68	0.46
2010		25	40	65	0.38
2011		25	46	71	0.35
		Total	854	731	1585

Table 2

GAAP and Non-GAAP Settlement Percentage by Year

Year	Percent Settled GAAP	Percent Settled Non-GAAP	GAAP - Non-GAAP
1983	0.00	1.00	-1.00
1984	1.00	1.00	0.00
1985	0.00	0.67	-0.67
1986	0.00	1.00	-1.00
1987	0.00	1.00	-1.00
1988	0.00	0.75	-0.75
1989	1.00	1.00	0.00
1990	1.00	0.89	0.11
1991	0.67	0.75	-0.08
1992	1.00	0.89	0.11
1993	1.00	0.94	0.06
1994	0.86	0.74	0.13
1995	0.96	0.90	0.05
1996	0.72	0.60	0.12
1997	0.75	0.64	0.11
1998	0.74	0.37	0.37
1999	0.63	0.43	0.21
2000	0.64	0.39	0.25
2001	0.76	0.48	0.28
2002	0.66	0.46	0.20
2003	0.63	0.42	0.21
2004	0.60	0.51	0.09
2005	0.50	0.31	0.19
2006	0.69	0.38	0.31
2007	0.53	0.25	0.28
2008	0.54	0.42	0.12
2009	0.32	0.24	0.07
2010	0.25	0.15	0.10
2011	0.17	0.09	0.08

Table 3

GAAP Lawsuits by Industry and Year

Major Industry Group Name	SIC Code	Year										Total
		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Metal Mining	10	-	1	-	-	-	-	1	-	-	1	3
Coal & Lignite Mining	12	-	-	-	-	-	-	-	1	-	-	1
Oil & Gas	13	-	-	-	-	-	-	1	1	1	-	3
Heavy Construction Other Than Building Construction Contractors	16	1	-	-	-	-	1	-	-	1	-	3
Food and Kindred Products	20	2	-	-	-	3	1	-	2	1	3	12
Tobacco Products	21	-	-	1	-	-	-	-	-	-	-	1
Textile Mill Products	22	-	-	1	-	1	-	-	-	-	-	2
Apparel and other Finished Products Made from Fabrics	23	1	1	1	2	1	4	1	-	1	-	12
Lumber and Wood Products, except furniture	24	-	-	1	1	-	1	-	-	-	1	4
Furniture and Fixtures	25	-	-	-	-	-	-	-	-	-	1	1
Paper and Allied Products	26	-	-	1	-	-	-	-	-	-	-	1
Printing, Publishing, and Allied Industries	27	-	1	1	1	-	1	-	-	-	1	5
Chemicals and Allied Products	28	1	1	2	5	5	-	2	3	5	4	28
Petroleum Refining and Related Industries	29	-	-	-	-	-	-	-	-	1	-	1
Rubber And Miscellaneous Plastics Products	30	-	-	-	1	1	-	-	1	1	-	4
Leather And Leather Products	31	-	-	1	-	-	-	-	-	-	-	1
Stone, Clay, Glass, And Concrete Products	32	-	-	-	-	-	1	1	-	-	-	2
Primary Metal Industries	33	-	-	1	-	-	1	1	-	-	-	3
Fabricated Metal Products	34	-	1	-	-	-	1	-	-	-	-	2
Industrial And Commercial Machinery And Computer Equipment	35	9	8	5	4	9	2	3	3	2	5	50
Electronic And Other Electrical Equipment And Components	36	-	1	4	2	3	6	5	7	8	9	45
Transportation Equipment	37	-	-	-	6	3	1	1	1	-	-	12
Measuring, Analyzing, And Controlling Instruments	38	-	-	3	5	1	1	2	1	1	3	17
Miscellaneous Manufacturing Industries	39	1	2	-	1	1	-	-	1	1	-	7
Motor Freight Transportation And Warehousing	42	-	-	1	-	-	-	-	-	1	-	2
Water Transportation	44	-	-	-	-	1	-	-	-	2	-	3
Transportation Services	47	1	-	-	-	1	-	2	-	-	-	4
Communications	48	-	2	-	-	4	1	5	1	1	1	15
Electric, Gas, And Sanitary Services	49	-	-	1	-	2	3	6	4	3	-	19
Wholesale Trade-durable Goods	50	-	-	3	3	-	2	1	-	-	1	10
Wholesale Trade-non-durable Goods	51	1	-	1	-	1	-	-	-	2	1	6
General Merchandise Stores	53	-	1	-	-	-	1	1	1	1	-	5
Food Stores	54	-	-	-	-	-	1	2	-	1	-	4
Automotive Dealers And Gasoline Service Stations	55	-	-	1	-	-	-	-	-	-	-	1
Apparel And Accessory Stores	56	-	-	-	-	-	-	1	-	1	-	2
Home Furniture, Furnishings, And Equipment Stores	57	-	-	-	-	1	-	1	-	-	-	2
Eating And Drinking Places	58	-	-	2	-	-	-	-	-	1	2	5
Miscellaneous Retail	59	2	1	2	2	2	2	-	1	2	2	16
Depository Institutions	60	1	-	-	2	1	2	4	2	-	1	13
Non-depository Credit Institutions	61	-	-	4	1	2	1	2	3	-	1	14
Security And Commodity Brokers, Dealers, Exchanges	62	-	-	-	-	-	-	-	2	1	-	3
Insurance Carriers	63	1	2	4	3	3	2	-	2	2	4	23
Insurance Agents, Brokers, And Service	64	-	-	1	1	-	-	-	-	1	2	5
Real Estate	65	-	-	-	-	1	-	-	-	-	-	1
Holding And Other Investment Offices	67	-	-	-	1	2	-	-	-	-	1	4
Personal Services	72	-	-	-	-	-	1	-	-	-	-	1
Business Services	73	1	11	10	11	17	11	7	15	19	9	111
Automotive Repair, Services, And Parking	75	-	-	-	-	-	-	-	1	-	-	1
Motion Pictures	78	-	-	-	1	-	-	-	-	1	1	3
Amusement And Recreation Services	79	-	2	1	-	-	-	-	-	-	-	3
Health Services	80	3	4	2	1	1	-	3	1	5	-	20
Educational Services	82	-	-	2	-	-	-	1	1	2	-	6
Social Services	83	-	-	-	1	-	-	-	-	-	-	1
Engineering, Accounting, Research, Management	87	-	-	-	1	-	-	2	-	5	-	9
Nonclassifiable Establishments	99	-	-	-	-	-	-	-	-	1	-	1
Total		25	39	57	56	67	49	56	55	75	56	535

Table 4

GAAP Violations Alleged in Private Securities Class Actions

Nature of Alleged Violation	Number of Cases	Cited Standards
Improper Revenue Recognition	182	SFAC 5, SFAS 48, SAB 101 and 104, SOP 97-2, SOP 81-1, EITF 00-21, ARB 43 Ch.1, APB 10, AAER 817 and 812, SFAS 5, APB 29
Improper Contingent Reserves, All	153	SFAS 5
Loan Loss Reserves	12	SFAS 5
Uncollectible Accounts Reserve	48	SFAS 5
Sales Returns Reserve	20	SFAS 5
Improper "Cookie Jar" Reserves	14	SFAS 5
Other/General Contingent Reserve	79	SFAS 5
Failure to Write-Down Assets, All	81	
Inventory Write-down	34	ARB 43 Ch.4 St.5, APB 12
Goodwill or Intangible Asset Impairment	16	SFAS 142, SFAS 121
Impairment of Securities	11	SFAS 115, SFAS 91, SFAS 114
Other Long-Term Asset Impairment	20	SFAS 144, SFAS 121
Improper Expense Capitalization	23	SOP 98-1, SOP 97-3, SFAS 71, SFAS 2, SFAS 86
Failure to Disclose Accounting Policies	27	APB 22
Failure to Disclose Risks	14	SOP 94-6
Accounting for Income Taxes	13	SFAS 109
Lease Accounting	13	SFAS 13
Understated Amortization or Depreciation	13	APB 17, SFAS 71, SFAS 2, FIN 4
Related-Party Transaction Disclosure	12	SFAS 57
Mergers and Acquisitions	11	APB 16
Failure to Consolidate Related Entities	7	APB 18
Off-Balance Sheet Liabilities or Assets	6	FIN 46(R), SFAS 140, SFAS 125, SFAS 47, ARB 51, SFAS 94, EITF 96-20, EITF 96-21
Derivative Accounting	5	SFAS 133
Nonmonetary Transactions	5	APB 29
Failure to Restate Financial Statements	5	APB 20, APB 9
Stock Option Accounting	4	SFAS 123, APB 25, SFAS 109
Failure to Disclose Impact of Accounting Changes	2	SAB 74
Roundtrip Reinsurance Transaction	2	SFAS 113
Business Segment Reporting	2	SFAS 131, APB 30
Foreign Currency Translation Gains and Losses	1	SFAS 52
General Conceptual Principles	135	SFAC 1, SFAC 2
No specific standards cited	83	

Table 5
Variable Definitions

Variable Name	Definition
<i>DiscRev</i>	discretionary revenues as in Stubben (2010). Calculated as the residual from the following regression, run industry and year: $(AR_{i,q} + AR_{i,q-1} + AR_{i,q-2} + AR_{i,q-3}) - (AR_{i,q-4} + AR_{i,q-5} + AR_{i,q-6} + AR_{i,q-7}) = \alpha + \beta 1(REV_{i,q} - REV_{i,q-4}) + \beta 2[(REV_{i,q-1} + REV_{i,q-2} + REV_{i,q-3}) - (REV_{i,q-5} + REV_{i,q-6} + REV_{i,q-7})] + \varepsilon$
<i>NSPI_YN</i>	indicator variable equal to 1 in each firm-quarter where a negative special item is reported on the income statement.
<i>NSPI_size</i>	size of NSPI reported in each firm-quarter (in millions), scaled by income before extraordinary items.
<i>LMB_YN</i>	frequency of meeting or beating analysts' estimates, measured as the percentage of current quarter and next three quarters in which earnings meets or exceeds the average forecast of analysts in I/B/E/S by more than \$0.03.
<i>SMB_YN</i>	frequency of meeting or beating analysts' estimates, measured as the percentage of current quarter and next three quarters in which earnings meets or exceeds by \$0.03 or less the average forecast of analysts in I/B/E/S.
<i>Abnorm_CFO</i>	Abnormal Cash Flows from Operations, defined as actual CFO minus predicted CFO using estimated coefficients from the regression: $CFO_{it}/Assets_{i,t-1} = k_{1t}(1/Assets_{i,t-1}) + k_2(Sales_{it}/Assets_{i,t-1}) + k_3(\Delta Sales_{it}/Assets_{i,t-1}) + \varepsilon_{it}$.
<i>Abnorm_prod</i>	Abnormal production costs, where production costs equals COGS plus Δ inventory, defined as actual production costs minus predicted production costs using estimated coefficients from the regression: $Prod_{it}/Assets_{i,t-1} = k_{1t}(1/Assets_{i,t-1}) + k_2(Sales_{it}/Assets_{i,t-1}) + k_3(\Delta Sales_{it}/Assets_{i,t-1}) + k_4(\Delta Inventory_{it}/Assets_{i,t-1}) + \varepsilon_{it}$.
<i>Abnorm_disc_exp</i>	Abnormal discretionary expenses, where discretionary expenses equals R&D expense plus SG&A, defined as actual discretionary expenses minus predicted discretionary expenses using estimated coefficients from the regression: $Disc_exp_{it}/Assets_{i,t-1} = k_{1t}(1/Assets_{i,t-1}) + k_2(Sales_{i,t-1}/Assets_{i,t-1}) + \varepsilon_{it}$.
<i>Std_ret</i>	standard deviation of quarterly firm stock returns
<i>Ret_skewness</i>	skewness of quarterly firm stock returns
<i>Min_ret</i>	minimum daily firm market-adjusted stock return in each firm-quarter
<i>Pre_sued</i>	= 1 for firm-quarter observations in the 8 quarters prior to a lawsuit filing against that firm.
<i>Post_settle/dismiss</i>	= 1 for firm-quarter observations in the quarter of a firm's lawsuit settlement/dismissal and the following 8 quarters.
<i>Pre_sued_ind</i>	= 1 for firm-quarter observations in the 8 quarters prior to a lawsuit against another firm in the same 2-digit SIC industry and market decile.
<i>Post_ind_settle/dismiss</i>	= 1 for firm-quarter observations in the quarter of a settlement or dismissal of a lawsuit against another firm in the same 2-digit SIC industry and market decile and the following 8 quarters.
<i>Pre_sued_aud</i>	= 1 for firm-quarter observations in the 8 quarters prior to the filing of a lawsuit against another firm with the same auditor headquartered in the same judicial circuit.
<i>Post_aud_settle/dismiss</i>	= 1 for firm-quarter observations in the quarter of the settlement/dismissal of a lawsuit against another firm with the same auditor headquartered in the same judicial circuit and the following 8 quarters.
<i>Pre_GAAP_suit</i>	= <i>Pre_sued</i> * 1 if the lawsuit contains GAAP allegations and *0 otherwise.
<i>Post_GAAP_settle/dismiss</i>	= <i>Post_settle/dismiss</i> * 1 if the resolved lawsuit contained GAAP allegations and *0 otherwise.
<i>Pre_ind_GAAP</i>	= <i>Pre_sued_ind</i> * 1 if the lawsuit contains GAAP allegations and *0 otherwise.
<i>Post_ind_GAAP_settle/dismiss</i>	= <i>Post_ind_settle/dismiss</i> * 1 if the resolved lawsuit contained GAAP allegations and *0 otherwise.
<i>Pre_aud_GAAP</i>	= <i>Pre_sued_aud</i> * 1 if the lawsuit contains GAAP allegations and *0 otherwise.
<i>Post_aud_GAAP_settle/dismiss</i>	= <i>Post_aud_settle/dismiss</i> * 1 if the resolved lawsuit contained GAAP allegations and *0 otherwise.
<i>Pre_revrec_suit</i>	= <i>Pre_sued</i> * 1 if the lawsuit contains revenue recognition allegations and *0 otherwise.
<i>Post_revrec_settle/dismiss</i>	= <i>Post_settle/dismiss</i> * 1 if the resolved lawsuit contained revenue recognition allegations and *0 otherwise.
<i>Pre_ind_revrec</i>	= <i>Pre_sued_ind</i> * 1 if the lawsuit contains revenue recognition allegations and *0 otherwise.
<i>Post_ind_revrec_settle/dismiss</i>	= <i>Post_ind_settle/dismiss</i> * 1 if the resolved lawsuit contained revenue recognition allegations and *0 otherwise.
<i>Pre_aud_revrec</i>	= <i>Pre_sued_aud</i> * 1 if the lawsuit contains revenue recognition allegations and *0 otherwise.
<i>Post_aud_revrec_settle/dismiss</i>	= <i>Post_aud_settle/dismiss</i> * 1 if the resolved lawsuit contained revenue recognition allegations and *0 otherwise.

Table 5 Continued

Variable Name	Definition
<i>Pre_writedown_suit</i>	= <i>Pre_sued</i> *1 if the lawsuit contains asset impairment recognition allegations and *0 otherwise.
<i>Post_writedown_settle/dismiss</i>	= <i>Post_settle/dismiss</i> *1 if the resolved lawsuit contained asset impairment recognition allegations and *0 otherwise.
<i>Pre_ind_writedown</i>	= <i>Pre_sued_ind</i> *1 if the lawsuit contains asset impairment recognition allegations and *0 otherwise.
<i>Post_ind_writedown_settle/dismiss</i>	= <i>Post_ind_settle/dismiss</i> *1 if the resolved lawsuit contained asset impairment recognition allegations and *0 otherwise.
<i>Pre_aud_writedown</i>	= <i>Pre_sued_aud</i> *1 if the lawsuit contains asset impairment recognition allegations and *0 otherwise.
<i>Post_aud_writedown_settle/dismiss</i>	= <i>Post_aud_settle/dismiss</i> *1 if the resolved lawsuit contained asset impairment recognition allegations and *0 otherwise.
<i>GAAP_cites</i>	for cases with GAAP allegations, the number of times per year a judicial opinion on a motion to dismiss and any appellate decision(s) are cited by future judicial opinions and court documents.
<i>RevRec_cites</i>	for cases with revenue recognition allegations, the number of times per year a judicial opinion on a motion to dismiss and any appellate decision(s) are cited by future judicial opinions and court documents.
<i>Writedown_cites</i>	for cases with asset impairment allegations, the number of times per year a judicial opinion on a motion to dismiss and any appellate decision(s) are cited by future judicial opinions and court documents.
<i>ROA</i>	Return On Assets, defined as income before extraordinary items scaled by the prior period total assets.
<i>Salesgrowth</i>	change in sales from the same quarter in the previous year, scaled by total assets in the same quarter in the previous year.
<i>MTB</i>	Market capitalization divided by book value of equity.
<i>Size</i>	the natural log of market capitalization.
<i>Age</i>	the number of years the firm has appeared in Compustat up to the current firm-quarter.
<i>Leverage</i>	total long term debt divided by total assets.
<i>Goodwill</i>	goodwill reported on the balance sheet scaled by total assets.
<i>Num_analyst</i>	number of I/B/E/S analysts following the firm for each firm-quarter.
<i>Std_ret_mkt</i>	standard deviation of the CRSP value-weighted market return for each quarter
<i>AveVol</i>	average volume of shares traded for each firm quarter (total volume/average shares outstanding)
<i>DP</i>	ratio of dividends paid in the quarter to market value of equity
<i>EP</i>	ratio of income before extraordinary items to market value of equity

Table 6

Changes in Discretionary Revenues following Private Litigation

$$Disc_Rev_{i,q} = \beta_1 + \beta_2 Pre_settle_{i,q} + \beta_3 Post_Settle_{i,q} + \beta_4 Pre_dismiss_{i,q} + \beta_5 Post_dismiss_{i,q} + \beta_6 Pre_GAAP_settle_{i,q} + \beta_7 Post_GAAP_settle_{i,q} + \beta_8 Pre_GAAP_dismiss_{i,q} + \beta_9 Post_GAAP_dismiss_{i,q} + \beta_{10} Pre_RevRec_settle_{i,q} + \beta_{11} Post_RevRec_settle_{i,q} + \beta_{12} Pre_RevRec_dismiss_{i,q} + \beta_{13} Post_RevRec_dismiss_{i,q} + \beta_{14} Pre_GAAP_settle_{i,q} * Cites + \beta_{15} Post_GAAP_settle_{i,q} * Cites + \beta_{16} Pre_GAAP_dismiss_{i,q} * Cites + \beta_{17} Post_GAAP_dismiss_{i,q} * Cites + \beta_{18} Pre_RevRec_settle_{i,q} * Cites + \beta_{19} Post_RevRec_settle_{i,q} * Cites + \beta_{20} Pre_RevRec_dismiss_{i,q} * Cites + \beta_{21} Post_RevRec_dismiss_{i,q} * Cites + \beta_{22} Pre_auditor_def_{i,q} + \beta_{23} Post_auditor_def_{i,q} + \Sigma \gamma_k Controls_{k,i,q} + Industry_FE + Circuit_FE + Year_FE + \varepsilon_{i,q}$$

	Sued Firm	Industry Peers	Shared Auditor Peers
<i>Post_settle - Pre_settle</i>	-0.0134	-0.00452***	-0.00158
<i>P-Value</i>	0.176	0.00937	0.270
<i>Post_dismiss - Pre_dismiss</i>	-0.0113**	-0.00569***	-0.00248*
<i>P-Value</i>	0.0393	0.000	0.0969
<i>Post_GAAP_settle - Pre_GAAP_settle</i>	-0.0179	-0.000322	-0.000554
<i>P-Value</i>	0.197	0.927	0.691
<i>Post_GAAP_dismiss - Pre_GAAP_dismiss</i>	-0.00155	-0.00323*	0.000347
<i>P-Value</i>	0.871	0.0907	0.861
<i>Post_revrec_settle - Pre_revrec_settle</i>	0.00321	-0.00310**	-0.00199
<i>P-Value</i>	0.739	0.050	0.134
<i>Post_revrec_dismiss - Pre_revrec_dismiss</i>	-0.00386	0.00526	-0.00198
<i>P-Value</i>	0.856	0.194	0.189
<i>Post_GAAP_settle*Cites - Pre_GAAP_settle*Cites</i>	0.00377	-0.00570***	-0.000434
<i>P-Value</i>	0.628	0.000	0.336
<i>Post_GAAP_dismiss*Cites - Pre_GAAP_dismiss*Cites</i>	0.00385	0.00157**	0.000300
<i>P-Value</i>	0.358	0.0109	0.616
<i>Post_revrec_settle*Cites - Pre_revrec_settle*Cites</i>	-0.00884	0.00495***	0.000411
<i>P-Value</i>	0.308	0.00215	0.562
<i>Post_revrec_dismiss*Cites - Pre_revrec_dismiss*Cites</i>	-0.00681	-0.00152	0.000855
<i>P-Value</i>	0.505	0.225	0.423
<i>Post_auditor_def - Pre_auditor_def</i>	0.00648	-0.000476	0.000976
<i>P-Value</i>	0.433	0.665	0.397
Observations	185,473	185,473	185,473
R-squared	0.169	0.170	0.169

Table 4 presents results derived from OLS regressions of the form displayed above. The results displayed represent the difference between the applicable post- and pre-litigation coefficient, followed by the P-value of an F-test of the form $Post_variable - Pre_variable = 0$. The pre- and post-litigation variables are indicator variables based on the presence and characteristics of lawsuits in two year periods before a lawsuit is filed or after a lawsuit is resolved. The regression includes industry-, judicial circuit-, and year fixed effects. Continuous variables are winsorized at the 1st and 99th percentiles. ***, **, and * represent significance at the 1%, 5%, and 10% levels respectively. All variables as defined in Table 3.

Table 7

Changes in Propensity and Mean of Negative Special Item Reporting following Private Litigation

$$NSPI_YN_{i,q}/Mean_NSPI_{i,q} = \beta_1 + \beta_2 Pre_settle_{i,q} + \beta_3 Post_Settle_{i,q} + \beta_4 Pre_dismiss_{i,q} + \beta_5 Post_dismiss_{i,q} + \beta_6 Pre_GAAP_settle_{i,q} + \beta_7 Post_GAAP_settle_{i,q} + \beta_8 Pre_GAAP_dismiss_{i,q} + \beta_9 Post_GAAP_dismiss_{i,q} + \beta_{10} Pre_writedown_settle_{i,q} + \beta_{11} Post_writedown_settle_{i,q} + \beta_{12} Pre_writedown_dismiss_{i,q} + \beta_{13} Post_writedown_dismiss_{i,q} + \beta_{14} Pre_GAAP_settle_{i,q} * Cites + \beta_{15} Post_GAAP_settle_{i,q} * Cites + \beta_{16} Pre_GAAP_dismiss_{i,q} * Cites + \beta_{17} Post_GAAP_dismiss_{i,q} * Cites + \beta_{18} Pre_writedown_settle_{i,q} * Cites + \beta_{19} Post_writedown_settle_{i,q} * Cites + \beta_{20} Pre_writedown_dismiss_{i,q} * Cites + \beta_{21} Post_writedown_dismiss_{i,q} * Cites + \beta_{22} Pre_auditor_def_{i,q} + \beta_{23} Post_auditor_def_{i,q} + \Sigma \gamma_k Controls_{k,i,q} + Industry_FE + Circuit_FE + Year_FE + \varepsilon_{i,q}$$

	Firm		Industry		Auditor	
	NSPI_YN	NSPI_size	NSPI_YN	NSPI_size	NSPI_YN	NSPI_size
<i>Post_settle - Pre_settle</i>	0.189	0.00503	0.0788	0.00752	0.0375	0.00104
<i>P-Value</i>	0.275	0.733	0.162	0.145	0.400	0.306
<i>Post_dismiss - Pre_dismiss</i>	-0.0446	0.0110	0.174***	-0.00888***	0.0741*	0.000
<i>P-Value</i>	0.806	0.102	0.00101	0.00125	0.0902	0.985
<i>Post_GAAP_settle - Pre_GAAP_settle</i>	-0.313	-0.0226	0.0513	-0.00920*	0.0753*	-0.000360
<i>P-Value</i>	0.205	0.138	0.433	0.0970	0.0645	0.730
<i>Post_GAAP_dismiss - Pre_GAAP_dismiss</i>	0.0506	-0.00664	0.00843	0.00873***	0.0433	0.000501
<i>P-Value</i>	0.849	0.527	0.899	0.00313	0.449	0.525
<i>Post_writedown_settle - Pre_writedown_settle</i>	-0.573	0.0299**	-0.00469	-0.00284	-0.000391	0.000882
<i>P-Value</i>	0.178	0.0148	0.962	0.471	0.993	0.195
<i>Post_writedown_dismiss - Pre_writedown_dismiss</i>	0.599	-0.0331*	0.0934	-0.00746	-0.0973	-0.000761
<i>P-Value</i>	0.413	0.0569	0.293	0.138	0.242	0.642
<i>Post_GAAP_settle*Cites - Pre_GAAP_settle*Cites</i>	0.0523	0.00194	0.00806	0.000705	0.0168	-0.000485*
<i>P-Value</i>	0.782	0.661	0.707	0.671	0.464	0.0650
<i>Post_GAAP_dismiss*Cites - Pre_GAAP_dismiss*Cites</i>	0.0108	0.00180	0.00895	0.000827	0.000635	-0.000210
<i>P-Value</i>	0.941	0.771	0.830	0.673	0.974	0.365
<i>Post_writedown_settle*Cites - Pre_writedown_settle*Cites</i>	0.276	0.000710	0.0470	-0.000735	-0.0181	0.000
<i>P-Value</i>	0.292	0.941	0.307	0.820	0.621	0.942
<i>Post_writedown_dismiss*Cites - Pre_writedown_dismiss*Cites</i>	-0.457	0.0158	-0.00766	-0.000516	0.0862*	0.000216
<i>P-Value</i>	0.255	0.206	0.877	0.757	0.0531	0.849
<i>Post_auditor_def - Pre_auditor_def</i>	0.519*	0.0105	-0.397***	0.0239***	-0.117**	-0.000944
<i>P-Value</i>	0.0984	0.215	0.000	0.00703	0.0145	0.363
Observations	238,765	52,711	238,765	52,711	216,613	235,477
Pseudo R-squared/ R-squared	0.090	0.270	0.093	0.273	0.097	0.066

Table 5 presents results derived from logit (for propensity) and OLS (for size) regressions of the form displayed above. The results displayed represent the difference between the applicable post- and pre-litigation coefficient, followed by the P-value of an F-test of the form *Post_variable-Pre_variable* = 0. The pre- and post-litigation variables are indicator variables based on the presence and characteristics of lawsuits in two year periods before a lawsuit is filed or after a lawsuit is resolved. The regression includes industry-, judicial circuit-, and year fixed effects. Continuous variables are winsorized at the 1st and 99th percentiles. ***, **, and * represent significance at the 1%, 5%, and 10% levels respectively. All variables as defined in Table 3.

Table 8

Changes in Propensity to Meet or Beat Analysts' Forecasts following Private Litigation

$$LMB_YN_{i,q}/SMB_YN_{i,q} = \beta_1 + \beta_2 Pre_settle_{i,q} + \beta_3 Post_Settle_{i,q} + \beta_4 Pre_dismiss_{i,q} + \beta_5 Post_dismiss_{i,q} + \beta_6 Pre_GAAP_settle_{i,q} + \beta_7 Post_GAAP_settle_{i,q} + \beta_8 Pre_GAAP_dismiss_{i,q} + \beta_9 Post_GAAP_dismiss_{i,q} + \beta_{10} Pre_GAAP_settle_{i,q} * Cites + \beta_{11} Post_GAAP_settle_{i,q} * Cites + \beta_{12} Pre_GAAP_dismiss_{i,q} * Cites + \beta_{13} Post_GAAP_dismiss_{i,q} * Cites + \beta_{14} Pre_auditor_def_{i,q} + \beta_{15} Post_auditor_def_{i,q} + \sum_k \gamma_k Controls_{k,i,q} + Industry_FE + Circuit_FE + Year_FE + \epsilon_{i,q}$$

	Firm		Industry		Auditor	
	Large MorB	Small MorB	Large MorB	Small MorB	Large MorB	Small MorB
<i>Post_settle - Pre_settle</i>	-0.465***	0.253	-0.0572	0.0181	0.0355	-0.0534
<i>P-Value</i>	0.00797	0.255	0.534	0.831	0.564	0.379
<i>Post_dismiss - Pre_dismiss</i>	0.0154	0.189*	0.00798	-0.00894	0.083*	-0.0561**
<i>P-Value</i>	0.906	0.0849	0.832	0.859	0.0569	0.0486
<i>Post_GAAP_settle - Pre_GAAP_settle</i>	0.728***	-0.408	0.0235	-0.0288	0.109**	-0.0473
<i>P-Value</i>	0.000549	0.142	0.806	0.788	0.0245	0.380
<i>Post_GAAP_dismiss - Pre_GAAP_dismiss</i>	0.528*	-0.171	0.118*	0.0325	0.00584	0.0524
<i>P-Value</i>	0.0725	0.482	0.0529	0.552	0.855	0.148
<i>Post_GAAP_settle*Cites - Pre_GAAP_settle*Cites</i>	0.0362	0.127	0.0766*	-0.0629***	0.0179	-0.0126
<i>P-Value</i>	0.749	0.216	0.0687	0.00216	0.142	0.219
<i>Post_GAAP_dismiss*Cites - Pre_GAAP_dismiss*Cites</i>	-0.00779	0.00714	0.0323*	-0.0521***	0.0240*	-0.0124
<i>P-Value</i>	0.948	0.940	0.0717	0.000143	0.0565	0.233
<i>Post_auditor_def - Pre_auditor_def</i>	1.070*	-0.987**	-0.119*	0.152***	-0.112*	0.112***
<i>P-Value</i>	0.0753	0.0113	0.100	0.000113	0.0949	0.00612
Observations	129,391	129,391	129,391	129,391	129,391	129,391
Pseudo R-squared	0.053	0.065	0.054	0.066	0.053	0.065

Table 6 presents results derived from logit regressions of the form displayed above. The results displayed represent the difference between the applicable post- and pre-litigation coefficient, followed by the P-value of an F-test of the form $Post_variable - Pre_variable = 0$. The pre- and post-litigation variables are indicator variables based on the presence and characteristics of lawsuits in two year periods before a lawsuit is filed or after a lawsuit is resolved. The regression includes industry-, judicial circuit-, and year fixed effects. Continuous variables are winsorized at the 1st and 99th percentiles. ***, **, and * represent significance at the 1%, 5%, and 10% levels respectively. All variables as defined in Table 3.

Table 9

Changes in Real Earnings Management following Private Litigation

$$\begin{aligned}
& Abnorm_CFO_{i,q}/Abnorm_Prod_{i,q}/Abnorm_DiscExp_{i,q} = \beta_1 + \beta_2 Pre_settle_{i,q} + \beta_3 Post_Settle_{i,q} + \beta_4 Pre_dismiss_{i,q} + \\
& \beta_5 Post_dismiss_{i,q} + \beta_6 Pre_GAAP_settle_{i,q} + \beta_7 Post_GAAP_settle_{i,q} + \beta_8 Pre_GAAP_dismiss_{i,q} + \beta_9 Post_GAAP_dismiss_{i,q} + \\
& \beta_{10} Pre_GAAP_settle_{i,q} * Cites + \beta_{11} Post_GAAP_settle_{i,q} * Cites + \beta_{12} Pre_GAAP_dismiss_{i,q} * Cites + \beta_{13} Post_GAAP_dismiss_{i,q} \\
& * Cites + \beta_{14} Pre_auditor_def_{i,q} + \beta_{15} Post_auditor_def_{i,q} + \sum_k \gamma_k Controls_{k,i,q} + Industry_FE + Circuit_FE + Year_FE + \varepsilon_{i,q}
\end{aligned}$$

Panel A: Sued Firms

	<i>Abnormal_CFO</i>	<i>Abnormal_Prod</i>	<i>Abnormal_DiscExp</i>
<i>Post_settle - Pre_settle</i>	0.00210	0.0130	-0.00142
<i>P-Value</i>	0.434	0.525	0.855
<i>Post_dismiss - Pre_dismiss</i>	-0.000335	0.00690	0.000123
<i>P-Value</i>	0.730	0.536	0.979
<i>Post_GAAP_settle - Pre_GAAP_settle</i>	-0.00197	-0.00431	0.00147
<i>P-Value</i>	0.445	0.840	0.869
<i>Post_GAAP_dismiss - Pre_GAAP_dismiss</i>	0.000539	0.00403	-0.000366
<i>P-Value</i>	0.661	0.740	0.952
<i>Post_GAAP_settle*Cites - Pre_GAAP_settle*Cites</i>	-0.00128**	0.0123***	0.00673*
<i>P-Value</i>	0.0418	0.00607	0.0845
<i>Post_GAAP_dismiss*Cites - Pre_GAAP_dismiss*Cites</i>	0.000382	-0.00772	-0.00188
<i>P-Value</i>	0.561	0.238	0.426
<i>Post_auditor_def - Pre_auditor_def</i>	-0.00341**	0.0588***	0.0253***
<i>P-Value</i>	0.0141	0.00960	0.000771
Observations	164,769	164,769	164,769
R-squared	0.253	0.394	0.340

Panel B: Industry Peers

	<i>Abnormal_CFO</i>	<i>Abnormal_Prod</i>	<i>Abnormal_DiscExp</i>
<i>Post_settle - Pre_settle</i>	0.00207**	-0.0127*	-0.00916**
<i>P-Value</i>	0.0179	0.0715	0.0118
<i>Post_dismiss - Pre_dismiss</i>	0.00107	-0.00740*	-0.00527*
<i>P-Value</i>	0.215	0.0764	0.0751
<i>Post_GAAP_settle - Pre_GAAP_settle</i>	-0.00163*	0.00290	0.00434
<i>P-Value</i>	0.0553	0.618	0.192
<i>Post_GAAP_dismiss - Pre_GAAP_dismiss</i>	0.000681	-0.00502	-0.00202
<i>P-Value</i>	0.136	0.181	0.395
<i>Post_GAAP_settle*Cites - Pre_GAAP_settle*Cites</i>	-0.000263	-0.00319***	-0.00126***
<i>P-Value</i>	0.265	0.00161	0.00647
<i>Post_GAAP_dismiss*Cites - Pre_GAAP_dismiss*Cites</i>	-0.000186*	0.000780	0.00102**
<i>P-Value</i>	0.0871	0.345	0.0158
<i>Post_auditor_def - Pre_auditor_def</i>	-0.000510	0.00735***	0.00128
<i>P-Value</i>	0.280	0.000440	0.291
Observations	164,769	164,769	164,769
R-squared	0.256	0.395	0.342

Table 9 Continued

Panel C: Shared Auditor Peers

	<i>Abnormal_CFO</i>	<i>Abnormal_Prod</i>	<i>Abnormal_DiscExp</i>
<i>Post_settle - Pre_settle</i>	-0.00117	-0.00235	-0.000201
<i>P-Value</i>	0.145	0.463	0.902
<i>Post_dismiss - Pre_dismiss</i>	0.00133**	-0.00112	-0.00184
<i>P-Value</i>	0.0206	0.721	0.257
<i>Post_GAAP_settle - Pre_GAAP_settle</i>	0.00109	-0.000273	-0.000879
<i>P-Value</i>	0.139	0.920	0.546
<i>Post_GAAP_dismiss - Pre_GAAP_dismiss</i>	-0.000370	-0.00634***	-0.00274**
<i>P-Value</i>	0.488	0.00620	0.0332
<i>Post_GAAP_settle*Cites - Pre_GAAP_settle*Cites</i>	0.000	-0.00177**	-0.000406
<i>P-Value</i>	0.601	0.0217	0.193
<i>Post_GAAP_dismiss*Cites - Pre_GAAP_dismiss*Cites</i>	-0.000159*	-0.000127	0.000297
<i>P-Value</i>	0.0996	0.872	0.468
<i>Post_auditor_def - Pre_auditor_def</i>	-0.00225**	0.00948**	0.00432*
<i>P-Value</i>	0.0229	0.0209	0.0843
Observations	164,769	164,769	164,769
R-squared	0.255	0.394	0.341

Table 7 presents results derived from OLS regressions of the form displayed above. The results displayed represent the difference between the applicable post- and pre-litigation coefficient, followed by the P-value of an F-test of the form $Post_variable - Pre_variable = 0$. The pre- and post-litigation variables are indicator variables based on the presence and characteristics of lawsuits in two year periods before a lawsuit is filed or after a lawsuit is resolved. The regression includes industry-, judicial circuit-, and year fixed effects. Continuous variables are winsorized at the 1st and 99th percentiles. ***, **, and * represent significance at the 1%, 5%, and 10% levels respectively. All variables as defined in Table 3.

Table 10

Changes in Stock Return Characteristics following Private Litigation

$$\text{Std_reti},q/\text{Ret_skewness},q/\text{Min_reti},q = \beta_1 + \beta_2\text{Pre_settle},q + \beta_3\text{Post_Settle},q + \beta_4\text{Pre_dismiss},q + \beta_5\text{Post_dismiss},q + \beta_6\text{Pre_GAAP_settle},q + \beta_7\text{Post_GAAP_settle},q + \beta_8\text{Pre_GAAP_dismiss},q + \beta_9\text{Post_GAAP_dismiss},q + \beta_{10}\text{Pre_GAAP_settle},q*\text{Cites} + \beta_{11}\text{Post_GAAP_settle},q*\text{Cites} + \beta_{12}\text{Pre_GAAP_dismiss},q*\text{Cites} + \beta_{13}\text{Post_GAAP_dismiss},q*\text{Cites} + \beta_{14}\text{Pre_auditor_def},q + \beta_{15}\text{Post_auditor_def},q + \Sigma\gamma_k\text{Controlsk},i,q + \text{Industry_FE} + \text{Circuit_FE} + \text{Year_FE} + \epsilon_i,q$$

Panel A: Sued Firms

	Std_Ret	Skew_Ret	Min_Ret
<i>Post_settle - Pre_settle</i>	-0.00206	-0.0756	0.00613
<i>P-Value</i>	0.214	0.237	0.164
<i>Post_dismiss - Pre_dismiss</i>	-0.00171**	0.0735	0.00677**
<i>P-Value</i>	0.0129	0.287	0.0117
<i>Post_GAAP_settle - Pre_GAAP_settle</i>	0.00470***	0.257***	-0.00549
<i>P-Value</i>	0.00275	0.000311	0.330
<i>Post_GAAP_dismiss - Pre_GAAP_dismiss</i>	0.00237	0.162	0.00175
<i>P-Value</i>	0.294	0.151	0.600
<i>Post_GAAP_settle*Cites - Pre_GAAP_settle*Cites</i>	-0.000521	0.0410	0.00376
<i>P-Value</i>	0.667	0.209	0.160
<i>Post_GAAP_dismiss*Cites - Pre_GAAP_dismiss*Cites</i>	-0.000670	-0.0239	0.000
<i>P-Value</i>	0.422	0.477	0.992
<i>Post_auditor_def - Pre_auditor_def</i>	0.000422	-0.0404	-0.00184
<i>P-Value</i>	0.815	0.705	0.661
Observations	219,417	219,415	219,418
R-squared	0.533	0.033	0.386

Panel B: Industry Peers

	Std_Ret	Skew_Ret	Min_Ret
<i>Post_settle - Pre_settle</i>	0.000877	-0.0199**	-0.00304
<i>P-Value</i>	0.421	0.0485	0.241
<i>Post_dismiss - Pre_dismiss</i>	0.000267	-0.0434***	-0.00159
<i>P-Value</i>	0.804	0.000134	0.515
<i>Post_GAAP_settle - Pre_GAAP_settle</i>	-0.00190**	-0.0147	0.00388**
<i>P-Value</i>	0.0178	0.578	0.0135
<i>Post_GAAP_dismiss - Pre_GAAP_dismiss</i>	-0.000285	0.0215	0.000627
<i>P-Value</i>	0.854	0.113	0.843
<i>Post_GAAP_settle*Cites - Pre_GAAP_settle*Cites</i>	0.00113***	-0.00749*	-0.00259**
<i>P-Value</i>	0.00422	0.0525	0.0159
<i>Post_GAAP_dismiss*Cites - Pre_GAAP_dismiss*Cites</i>	0.000	-0.00658	-0.000418
<i>P-Value</i>	0.956	0.122	0.136
<i>Post_auditor_def - Pre_auditor_def</i>	-0.00313***	-0.0309**	0.00811***
<i>P-Value</i>	0.000	0.0297	0.000
Observations	219,417	219,415	219,418
R-squared	0.534	0.033	0.387

Table 10 Continued

Panel C: Shared Auditor Peers

	Std_Ret	Skew_Ret	Min_Ret
<i>Post_settle - Pre_settle</i>	0.000980*	0.0154	-0.00227**
<i>P-Value</i>	0.0677	0.327	0.0458
<i>Post_dismiss - Pre_dismiss</i>	0.000572	0.0110	0.000
<i>P-Value</i>	0.257	0.349	0.914
<i>Post_GAAP_settle - Pre_GAAP_settle</i>	0.000318	0.00770	0.000672
<i>P-Value</i>	0.523	0.588	0.656
<i>Post_GAAP_dismiss - Pre_GAAP_dismiss</i>	0.00152***	0.00640	-0.00294**
<i>P-Value</i>	0.00551	0.687	0.0150
<i>Post_GAAP_settle*Cites - Pre_GAAP_settle*Cites</i>	0.000197***	-0.00306	-0.000601***
<i>P-Value</i>	0.00315	0.320	0.000390
<i>Post_GAAP_dismiss*Cites - Pre_GAAP_dismiss*Cites</i>	0.000	-0.00495	-0.000307
<i>P-Value</i>	0.597	0.358	0.362
<i>Post_auditor_def - Pre_auditor_def</i>	-0.00146***	-0.00345	0.00463***
<i>P-Value</i>	0.000998	0.692	0.000183
Observations	219,417	219,415	219,418
R-squared	0.534	0.033	0.387

Table 8 presents results derived from OLS regressions of the form displayed above. The results displayed represent the difference between the applicable post- and pre-litigation coefficient, followed by the P-value of an F-test of the form $\text{Post_variable} - \text{Pre_variable} = 0$. The pre- and post-litigation variables are indicator variables based on the presence and characteristics of lawsuits in two year periods before a lawsuit is filed or after a lawsuit is resolved. The regression includes industry-, judicial circuit-, and year fixed effects. Continuous variables are winsorized at the 1st and 99th percentiles. ***, **, and * represent significance at the 1%, 5%, and 10% levels respectively. All variables as defined in Table 3.

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