

Financial Statement Misstatements, Auditor Litigation, and Subsequent Auditor Behavior

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SUMMARY: This paper examines the occurrence of auditor litigation related to financial statement misstatements and the effect of auditor misstatement-based litigation on subsequent auditor behavior. The study is motivated by recent calls to limit auditor legal liability and the need to examine the ability of litigation to deter non-GAAP financial reporting. I find that misstatement severity is the primary driver of auditor litigation. Specifically, I find that auditor misstatement-based litigation is more likely when the misstatement is associated with fraud, a regulatory investigation, a larger stock price decline, and/or a greater number of accounting application (i.e., FASB/GAAP) failures. In addition, I find that auditor misstatement-based litigation is more likely when the misstatement is associated with engagement fees that consist of a greater magnitude or a greater proportion of non-audit service fees. With respect to subsequent auditor behavior, I find evidence that auditor litigation results in more conservative auditor behavior across a litigated auditor's office-wide client portfolio (that excludes the litigated client). Specifically, in the year following auditor litigation, I find evidence that litigation results in increased auditor constraint of client-reported positive and signed discretionary accruals as well as longer audit report lags.

INTRODUCTION

This paper examines the occurrence of auditor litigation related to financial statement misstatements and the effect of auditor litigation on subsequent auditor behavior. Auditor legal liability and litigation reform has been a topic of discussion since the late 1970s (Latham and Linville 1998). However, the recent increase in auditor litigation¹ and the collapse of Arthur Andersen has spurred debate among regulators and auditors about the appropriate level of auditor legal liability. Advocates for legal liability reform argue that auditor lawsuits are often without merit (Latham and Linville 1998) and that lawsuits may jeopardize the sustainability of the profession (Taub 2007). According to Cynthia Fornelli, executive director of the Center for Audit Quality, “It could take only one or two cases where settlement is not reached to threaten a[nother] firm’s existence” (Rappeport 2008). The loss of an additional major accounting firm could prevent public companies from obtaining timely audits and could, therefore, significantly disrupt the capital markets (Advisory Committee on the Auditing Profession 2008).

Critics of legal liability reform argue that litigation provides a vital role in ensuring accountability and confidence in our financial markets (Advisory Committee on the Auditing Profession 2008). They argue that reductions in auditor liability would make auditors less vigilant and would reduce audit quality (Taub 2007). However, advocates for legal liability reform argue that the professional standards, PCAOB inspections, and firm-specific quality control practices provide adequate incentive to ensure professional auditor behavior (Advisory Committee on the Auditing Profession 2008). In response to these conflicting views, the U.S. Treasury Department Advisory Committee on the Auditing Profession included a discussion of the role of the civil litigation system in public audits and the potential need for auditor legal liability reform in their comprehensive analysis of the condition and future of the auditing profession. However, in their final report to the U.S. Treasury in October 2008, the committee stated that they were unable to find a consensus on the issue of liability reform because there were strongly held views on both sides of the debate (Advisory Committee on the Auditing Profession 2008). This suggests that auditor

¹ A recent study by the European Commission reports that litigation costs for U.S. audit practices has risen by almost eight percent between 1999 and 2004 (Advisory Committee on the Auditing Profession 2008).

exposure to civil litigation is an important and controversial issue and one that will continue to be debated. My study provides insights relevant to this controversy by examining the determinants of litigation following financial statement misstatements and the impact of litigation on subsequent auditor behavior. Any evidence that litigation improves subsequent auditor performance would suggest that litigation does play a role in maintaining audit quality.

Achieving the appropriate level of auditor legal liability requires limiting unnecessary litigation risk while simultaneously maintaining audit quality. Legal liability has often been viewed as a deterrence mechanism against non-GAAP financial reporting (Palmrose and Scholz 2004). Similarly, auditor legal liability may also be viewed as deterrent for substandard audit quality. In this paper, I investigate the non-GAAP deterrence effect of auditor litigation in two ways. First, I use annual financial statement misstatements to proxy for audit failures, and I examine the circumstances through which misstatements result in auditor litigation.² Second, I examine the effect of auditor litigation on subsequent auditor behavior. Specifically, I examine the effect of prior litigation on the likelihood that auditors employed at a litigated office constrain client discretionary accruals (DAC) and lengthen the audit report lag (ARL) across their office-wide client portfolio (that excludes the litigated client). Changes in auditor behavior resulting from prior litigation would consequently affect financial statement quality and thus may have a non-GAAP deterrence effect on auditors.³ In addition, positive changes in auditor behavior would indicate that auditor litigation does play an important role in improving and/or maintaining audit quality.

I find that several measures of misstatement severity are positively associated with the likelihood that a misstatement results in auditor litigation. Specifically, I find that auditor litigation is more likely to

² I exclude quarterly misstatements because Generally Accepted Auditing Standards (GAAS) require annual (quarterly) financial statements to be audited (reviewed). Thus, annual misstatements are a better proxy for audit failures.

³ Because financial statements are the joint product of management and auditor decisions, it is difficult to directly examine the effect of auditor behavior changes on the adherence of financial statements to GAAP. Consistent with prior literature, I rely on discretionary accruals as my measure for changes in financial statement quality which ultimately contribute to GAAP compliance. I do not examine subsequent non-GAAP reporting (i.e. misstatements) because I am predominantly interested in changes in *auditor behavior* that ultimately impact GAAP compliance. While misstatements may be the best measure of GAAP compliance, their occurrence is often driven by the actions of several parties including management, auditors, and those charged with overseeing the financial reporting process. My primary interest is in the actions of auditors that comprise one component of GAAP compliance.

follow misstatements that are associated with fraud, regulatory investigations, and/or larger stock price declines at the misstatement disclosure date. In addition, I find that litigation is more likely to follow misstatements associated with a greater number of accounting rule application (i.e., GAAP/FASB) failures, especially when the failures involve revenue recognition. These findings are similar to those of Palmrose and Scholz (2004), who find that core restatements (i.e. misstatements of earnings from primary operations), more pervasive restatements (i.e. misstatements involving more accounting issues), and misstatements disclosing the presence of fraud or irregularities are associated with auditor litigation.

However, I also find that auditor misstatement-based litigation is more likely when the misstatement is associated with engagement fees that consist of a greater magnitude or a greater proportion of non-audit service fees. This result suggests that non-audit fees may affect the plaintiff's perception of auditor independence and audit quality associated with an accounting misstatement.⁴ My tests do not reveal that auditor tenure is associated with the likelihood that a misstatement will result in auditor litigation. However, my tests do reveal that, after controlling for other determinants, misstatements by Big N auditors are less likely to result in litigation than misstatements by non-Big N auditors. These findings suggest that the perception that longer auditor-client relationships are associated with higher quality audits may not apply to litigation associated with misstatements. However, the perception that Big N auditors provide higher quality audits than non-Big N auditors may apply to litigation associated with misstatements. Overall, I contribute to prior literature by investigating the association between various auditor characteristics associated with misstatements and the occurrence of auditor litigation.

With respect to the effect of litigation on subsequent auditor behavior, I find evidence that auditors engage in more conservative behavior following litigation. Specifically, I find that, in the year following litigation, auditors employed at a litigated office are more likely than auditors not employed at

⁴For example, in Kmart Corporation court documents, the plaintiff uses financial reliance, primarily in the form of non-audit fees, as evidence for PricewaterhouseCoopers' participation in the material false and misleading financial statements [*D.E. & J. Ltd. P'ship v. Conaway, et als.*, No. 02-70684 at 56 (E.D. Mich. 2002) (Plaintiff's consolidated amended complaint)].

a litigated office to constrain signed and positive discretionary accruals across their office-wide client portfolio (that excludes the litigated client).⁵ My results suggest that, following litigation, auditors require more conservative financial reporting from their clients predominantly by constraining client income-increasing financial reporting behavior.⁶ In addition to the discretionary accruals results, I find that in the year following litigation, auditors employed at a litigated office have longer audit report lags than do auditors not employed at a litigated office. These findings suggest that litigation increases the amount of time auditors spend on subsequent audit engagements (again, across the auditor's office-wide client portfolio that excludes the litigated client).⁷ Overall, my findings suggest that with respect to the reporting of accruals and the time spent on an audit, auditor litigation does have a significant effect on subsequent auditor behavior.

My findings should be of interest to regulators and auditors. Specifically, when assessing the current level of auditor legal liability, regulators may wish to understand the circumstances under which auditors are held liable for past audit failures and how litigation may affect subsequent auditor behavior (which ultimately may impact financial reporting quality). Because of the reputational and financial costs of lawsuits, auditors may wish to understand the extent to which auditor and misstatement characteristics affect auditor liability.

The remainder of the paper is organized as follows. In the next section, I discuss related research and develop my hypotheses. The third section describes the data and my sample selection procedures. Following that, I present my methodology, model development, and variable definitions. Finally, I present the empirical results, and conclude.

⁵ My empirical tests exclude clients that were involved in the auditor litigation because I am interested in a widespread increase in auditor conservatism across an auditor's portfolio of clients not associated with the initial litigation.

⁶ However, my results are limited to a matching procedure that assigns a non-litigated auditor to a litigated auditor based on total *clients* audited in the year prior to litigation.

⁷ However, my results are limited to a matching procedure that assigns a non-litigated auditor to a litigated auditor based on total *assets* audited in the year prior to litigation.

RELATED RESEARCH AND HYPOTHESIS DEVELOPMENT

Financial Statement Misstatements Resulting in Auditor Litigation

Financial statements are the primary means by which detailed financial information is communicated to those outside the company. Prior research suggests that financial statements are the joint product of decisions made by the auditor and by company management (Antle and Nalbuff 1991). The auditor enhances financial reporting quality by detecting material errors and omissions before the financial statements are issued. A misstatement is the failure of an auditor to detect a material error or omission in the financial statements.

Litigation is a potential costly consequence of an audit failure, yet not all audit failures result in litigation (Carcello and Palmrose 1994; Palmrose and Scholz 2004). The ability of litigation to deter non-GAAP financial reporting associated with substandard audits can only occur when litigation acts as a mechanism holding auditors accountable for past audit failures. Prior behavioral research indicates that accountability or the prospect of accountability increases the vigilance of auditors (Nelson et al. 2005). Thus, the occurrence of litigation associated with substandard audits is necessary if auditors are to perceive litigation or the threat of litigation as a mechanism by which they are held accountable.

Prior research has examined the characteristics of audited financial statements that are associated with auditor litigation and finds that client size, financial condition, prior stock price changes, abnormal discretionary accruals, and various auditor characteristics (e.g. audit revenues, applied audit technology, audit opinion) are significantly associated with auditor litigation (St. Pierre and Anderson 1984; Stice 1991; Carcello and Palmrose 1994; Lys and Watts 1994; Henninger 2001). These studies match a sample of firm-year financial statement observations that resulted in litigation to a sample of firm-year financial statement observations that did not result in litigation without examining whether or not the financial statements were misstated. My study differs in that it conditions on an observable audit failure (i.e. misstatement) so that I may examine the characteristics associated with auditor liability when an audit failure is already known.

Palmrose and Scholz (2004) conducted a similar study where they conditioned on misstatements and investigated the characteristics of the misstatements that affect the likelihood of auditor litigation. They found that core restatements (i.e. those associated with earnings from primary operations), restatements involving fraud or irregularities, restatements with a greater number of accounting issues, restatements with a greater stock price decline at the disclosure date, and restatements issued by clients experiencing a recent IPO are more likely to result in auditor litigation. The first part of my study extends their analysis by adding various characteristics that describe and partition auditors (e.g., engagement fees and auditor tenure). These characteristics are important because prior research suggests that auditor tenure (Ghosh and Moon 2005) and engagement fees (Gul 1991; Hay et al. 2006) affect a third party's perception of audit quality. Thus, I expect that differences in auditor tenure and engagement fees may affect perceived audit quality and therefore, may affect the responsibility assigned to an auditor for a past misstatement. My study extends the literature on auditor litigation by investigating whether or not various auditor characteristics affect auditor culpability for past misstatements.

Effect of Auditor Litigation on Subsequent Auditor Behavior

While the occurrence of litigation may have the potential to deter non-GAAP financial reporting, there is no known empirical evidence that litigation does indeed deter non-GAAP financial reporting.⁸ For litigation to have this effect, it must affect the subsequent actions and choices of auditors (Latham and Linville 1998). Because prior research suggests that financial statements are the joint product of decisions made by the auditor and by company management (Antle and Nalbuff 1991), any changes in auditor behavior that result from litigation should ultimately affect the quality of subsequent financial statements. In this paper, I investigate the effect of auditor litigation on subsequent auditor behavior.⁹

Prior *empirical* research examines the effect of legal liability and litigation risk on auditor behavior. Lee and Mande (2003) examine the effect of the Private Securities Litigation Reform Act of

⁸ However, (Chang et al. 2008) find that auditor disciplinary actions in Taiwan result in more conservative subsequent auditor behavior as evidenced by a constraint in client-reported discretionary accruals.

⁹ My study is limited in that it does not directly examine the effect of changes in auditor behavior on subsequent GAAP compliance. Rather, it relies on discretionary accruals as its measure of changes in financial statement quality that ultimately contribute to GAAP compliance.

1995 (PSLRA) on client reported discretionary accruals. The PSLRA reduced auditor liability by replacing joint and several liability with proportionate liability. Lee and Mande (2003) find that income-increasing discretionary accruals for Big-6 audit clients rose following the passage of the PSLRA. They suggest that the legal liability reform of PSLRA reduced audit quality. Cahan and Zhang (2006) examine the effect of increased litigation risk of ex-Andersen clients on successor auditor behavior. After controlling for other litigation risk factors, they find that successor auditors required more conservative accounting from ex-Andersen clients through lower levels and larger decreases in abnormal accruals. In sum, their results suggest that litigation risk invokes more conservative auditor behavior. I extend this literature by controlling for litigation risk factors and investigate if *actual* litigation results in more conservative subsequent auditor behavior.

Prior *analytical* research also examines the effect of legal liability and litigation exposure on audit quality. Balachandran and Nagarajan (1987) find that alternative legal systems (i.e., strict liability versus negligence) can impact the level of due care chosen by an auditor, but that this level of care is also dependent on the auditor's perception of a client's financial condition. Thoman (1996) finds that additional legal exposure can induce auditors either to increase audit effort or to report more conservatively. Latham and Linville (1998, 201) state that "...although several analytical pieces examine the effect of litigation on audit quality, additional empirical verification of the models' results would be helpful." My study addresses this need by empirically examining the effect of auditor misstatement-based litigation on auditor reporting decisions and audit effort. Specifically, I investigate two subsequent auditor behaviors: (1) the likelihood of auditors to constrain client-reported discretionary accruals, and (2) the length of the audit report lag.

Hypothesis Development

Financial Statement Misstatements Resulting in Auditor Litigation

While prior research has examined the circumstances in which financial statement misstatements result in auditor litigation, my study extends the literature by adding various characteristics that describe and partition auditors (i.e., engagement fees and auditor tenure). First, I investigate whether the amount or

proportion of non-audit fees charged by an engaged auditor affects auditor culpability for past misstatements. Prior literature provides mixed evidence regarding the effect of non-audit services on auditor *performance* (e.g., DeFond et al. 2002; Frankel et al. 2002; Ashbaugh et al. 2003); however, prior literature indicates that engagement fees do affect the *perception* of auditor independence and auditor performance (Gul 1991; Hay et al. 2006). I examine both the magnitude of non-audit service fees and the proportion of total engagement fees that consist of non-audit service fees because both may affect the perception of auditor independence. A greater magnitude of non-audit service fees may indicate a failure of an auditor to maintain economic independence. A greater proportion of engagement fees that consist of non-audit engagement fees may indicate a failure of an auditor to maintain managerial independence.¹⁰ If third parties believe that an auditor has failed to maintain an independent mindset during an audit, they may be more inclined to assign blame to an auditor for a past misstatement. Second, I examine auditor tenure to assess whether the positive relationship between auditor tenure and perceived audit quality (Ghosh and Moon 2005) influences auditor culpability for past misstatements. This leads me to my first two formal hypotheses (stated in the alternative form):

H1: The likelihood that auditor litigation results from a past financial statement misstatement is greater when the misstatement involves engagement fees that consist of a greater magnitude or a greater proportion of non-audit service fees.

H2: The likelihood that auditor litigation results from a past financial statement misstatement is greater when the misstatement involves a shorter auditor-client relationship.

Effect of Auditor Litigation on Subsequent Auditor Behavior

Prior research defines auditor conservatism as an “auditor’s preference for income-decreasing accounting choices” (Kim et al. 2003, p. 327), and indicates that auditor litigation is more likely to result from an auditor’s failure to behave conservatively (St. Pierre and Anderson 1984). Thoman (1996) finds that additional legal exposure can induce auditors either to report more conservatively or to increase audit

¹⁰ AICPA Code of Professional Conduct Rule 101 states that an auditor must maintain independence by not having a direct financial interest in a client and by not performing management functions on behalf of a client (AICPA 2006).

effort. Thus, I predict that litigation will induce auditors¹¹ in all subsequent audit engagements to engage in more conservative behavior by monitoring and reducing management's reporting flexibility (i.e., reducing client reported discretionary accruals) and increasing the amount of time spent on audit engagements (i.e., lengthening the audit report lag). This section describes my formal hypotheses related to these auditor behaviors.

Accrual-based earnings involve estimates about future events and are jointly affected by client and auditor preferences. These estimates about future events introduce estimation error because clients and auditors have conflicting incentives. Clients have an incentive to use accruals to manage earnings¹² whereas auditors must decide on the appropriate level of accruals that are consistent with GAAP. I examine the likelihood that auditors constrain client reported discretionary accruals because prior research shows that accruals are often associated with the incidence of subsequent litigation (Lys and Watts 1994; Heninger 2001) and because auditors have an incentive to require more conservative accruals when litigation risk is high (DeFond and Subramyam 1998). Thus, I predict that litigation will induce auditors to engage in more conservative behavior evidenced by additional monitoring and reduction of management's reporting flexibility (i.e., reducing client reported discretionary accruals) in subsequent audit engagements. Because Heninger (2001) finds that the probability of *subsequent* auditor litigation increases as a client reports more income-increasing discretionary accruals, I predict that auditors employed at a litigated office will constrain income-increasing and signed discretionary accruals across their office-wide client portfolio (that excludes the litigated client) in order to avoid *future* litigation. I also examine the absolute value of discretionary accruals because Klein (2002) suggests that this measure should capture the magnitude of financial reporting decisions regardless of the directional effect of those decisions. While auditors may be primarily interested in constraining income-increasing behavior, they

¹¹ My analysis is conducted at the auditor city (i.e., audit office) level rather than the national (i.e., audit firm name) level because the occurrence of litigation would not vary at the national level.

¹² This assertion relies on the assumption that accruals are opportunistically manipulated by management. It is possible that accruals represent a signal from management regarding future prospects.

may also be inclined to constrain all discretionary behavior.¹³ This leads me to my third formal hypothesis (stated in the alternative form):

H3: Following litigation, the magnitude of positive, signed, and absolute value discretionary accruals reported by clients of litigated auditors is smaller than the magnitude of positive, signed, and absolute value discretionary accruals reported by clients of non-litigated auditors.

In addition to investigating the effect of litigation on the constraint of client accruals, I also examine the effect of litigation on the audit report lag (ARL). The ARL represents the length of time auditors require to complete an audit (Bamber et al. 1993). Consistent with prior research, I define the ARL as the number of days between a client's fiscal year-end and the audit report date (Ashton et al. 1987; Ashton et al. 1989; Bamber et al. 1993). Prior research provides evidence that the ARL increases with audit complexity and risk. Specifically, prior research shows that, on average, the ARL is positively associated with qualified audit opinions (Whittred 1980; Bamber et al. 1993), restatements of prior period financial statements (Kinney and McDaniel 1993), losses (Ashton et al. 1989; Bamber et al. 1993), and extraordinary items (Ashton et al. 1989; Bamber et al. 1993). I control for these audit and client characteristics known to increase the ARL, and I predict that litigation will induce auditors employed at a litigated office to lengthen the ARL across their office-wide client portfolio (that excludes the litigated client). A lengthening of the ARL would suggest that litigated auditors are spending more time (and perhaps are exercising more caution) in completing their audits. This leads me to my fourth formal hypothesis (stated in the alternative form):

H4: Following litigation, the ARL for clients of litigated auditors is longer than the ARL for clients of non-litigated auditors.

In sum, I predict that litigation will result in more conservative auditor behavior. Because financial reports are a joint product of decisions made by the auditor and company management, changes in auditor behavior should ultimately affect overall financial reporting quality. If observed changes in auditor

¹³ Client income-decreasing discretionary behavior can lead to "cookie-jar" reserve accounting that may unduly smooth net income and mislead financial investors about the true financial performance of the company.

behavior, specifically more conservative auditor behavior, improve financial statement quality then this may suggest that litigation deters – to at least some extent – non-GAAP financial reporting.¹⁴

SAMPLE AND DATA

Financial Statement Misstatements Resulting in Auditor Litigation

I identify all annual financial statement misstatements from the Audit Analytics database using restatements of previously audited annual financial statements disclosed from January 1, 2000 through December 31, 2007. Using audit opinion data available from the Audit Analytics database, I identify the engaged auditor during the misstated time period. Because misstated time periods often cover multiple fiscal year-ends, I retain only one unique firm-year observation per misstatement and assume that the auditor engaged at the end of the misstated time period is the auditor most likely to be sued.¹⁵ My initial misstatement sample consists of 1,673 observations with the data necessary to run my tests.¹⁶

< INSERT TABLE 2 >

I use the Audit Analytics database to identify all instances of auditor litigation disclosed as of June 18, 2008.¹⁷ The Audit Analytics database provides material legal proceedings and federal litigation filed against the top 100 accounting firms. I read each proceeding and limit my sample to litigation that alleges the financial statements to be misleading¹⁸, where the company Central Index Key (i.e., CIK) identifier and litigation date could be determined¹⁹, and where the auditor affected by litigation is located within the United States. Thus, my final empirical sample consists of 65 misstatements (3.9%) that result in litigation and 1,608 misstatements (96.1%) that do not result in litigation.

¹⁴ It is difficult to directly examine the effect of changes in auditor behavior on financial reporting quality. I rely on discretionary accruals as my measure of changes in financial statement quality.

¹⁵ The auditor engaged at the end of the misstated time period is the auditor sued in five of six lawsuits in my litigation sample where multiple auditors are engaged during the misstated time period.

¹⁶ I use the Audit Analytics, Compustat, CRSP, and Thompson Financial SDC databases to obtain the data necessary to construct my control variables.

¹⁷ I limited my analysis to auditor litigation listed in the following Audit Analytics categories: Accounting and Auditing Enforcement; Accounting malpractice; Ch 11 and Ch 7 bankruptcy; Class action; Financial reporting; IPO; Mergers & acquisitions; Professional liability; Other securities law; Stockholder suits. Several lawsuits were duplicated and categorized in several locations. I retained only one occurrence of the lawsuit and eliminated any lawsuit where the auditor was not listed as a defendant on the court docket.

¹⁸ This screen eliminates litigation resulting from employer-employee relations, auditor-client contractual disagreements, and independence concerns.

¹⁹ The CIK identifier is necessary so that I can identify which misstatements resulted in litigation.

Effect of Auditor Litigation on Subsequent Auditor Behavior

The second part of my study is conducted at the auditor city (i.e., audit office) level, and my empirical tests examine the subsequent auditor behavior associated with all clients (except the litigated client) serviced by a given office. In other words, my tests are aimed at determining whether litigation involving Auditor A and Client B is associated with changes in Auditor A's behavior across Auditor A's office-wide client portfolio (excluding Client B) in the year following litigation. Ball (2008) suggests that the penalties of a scandal resulting from poor audit office-level oversight typically fall on one or more partners but do not threaten the entire audit firm. Thus, my study focuses on auditor behavior at the audit office level. Prior literature finds an increase in financial reporting conservatism since the passage of the Sarbanes Oxley Act in 2002 (Lobo and Zhou 2006; Cohen et al. 2008). Because my sample of auditor litigation is comprised of lawsuits between 2000 and 2007, I use a matched-pairs design to control for the increase in auditor conservatism over this time period. Specifically, I match a litigated auditor to a similarly-sized non-litigated auditor and I compare the behavior of both auditors across their office-wide client portfolios (excluding the litigated client) in the year following litigation.

To begin my analysis, I first use the Audit Analytics database to identify the auditor city location for the auditors represented in my litigation sample. In four instances, two separate company misstatements are combined into a single lawsuit against one auditor. Thus, my initial sample consists of 61 unique auditor city locations cited with misstatement-based litigation.²⁰ I match each audit office cited with misstatement-based litigation (i.e., litigated auditor) to a similarly-sized audit office not cited with litigation (i.e., non-litigated auditor) based on the total assets (or clients) audited in the year prior to litigation.²¹ These matches are based on auditor size because I want my litigated and non-litigated auditors to have similar resources, personnel, and audit workload so that my empirical tests will have the

²⁰ I eliminate from my empirical tests six offices with multiple lawsuits during my time period because classification of observations into pre and post-litigation periods is unclear for these offices. I perform (untabulated) sensitivity tests that include these offices.

²¹ Using the Audit Analytics database, I review all available auditor litigation and ensure that my control offices are without *any* litigation (not just misstatement-based litigation). If an audit office is the closest in size to multiple litigated offices, I assign it to the litigated office most similar in size (i.e., with the smallest absolute value difference in total assets audited in the prior year). I then take the next best match for the remaining litigated office. This prevents control office observations from entering the empirical models more than once.

best chance of isolating differences in auditor behavior that are attributable to litigation.²² I require my control audit offices to audit between 50 and 150 percent of the total assets audited by my litigated audit offices.²³ My final auditor sample consists of 41 litigated audit offices matched to 41 non-litigated audit offices.

Next, I collect all financial statements issued by clients engaged by the litigated and non-litigated audit offices in the year prior and subsequent to the litigation commencement date.²⁴ I eliminate from my sample any financial statements issued by clients involved in the litigation because I expect auditor behavior to be more conservative for these clients and I do not want these observations to drive my results. Instead, I aim to examine the effect of litigation on auditor reporting behavior for all *other* clients. My final empirical sample consists of the client-year observations between 2000 and 2007 (both one year prior to and one year subsequent to litigation) with available Audit Analytics and Compustat data to run each of my empirical tests.²⁵

METHODOLOGY

Financial Statement Misstatements Resulting in Auditor Litigation

In this section, I discuss the empirical models I use to test my predictions. First, I estimate the following logistic regression model to investigate the occurrence of auditor litigation related to financial statement misstatements:

$$\begin{aligned}
 Litig = & \beta_0 + \beta_1 Fees + \beta_2 Tenure + \beta_3 BigN + \beta_4 Sox + \beta_5 Revenue + \quad (1) \\
 & \beta_6 Num_Issues + \beta_7 Fraud + \beta_8 Misstate_Length + \beta_9 Price_Change + \\
 & \beta_{10} Reg_Invest + \beta_{11} Time_Lapse + \beta_{12} Client_Size + \beta_{13} Bankrupt_Delist + \\
 & \beta_{14} Merger + \beta_{15} IPO + \beta_{16} Sales_Growth + \beta_{17} Lit_Ind + \beta_{18} Receivables_Ratio + \beta_{19} \\
 & Inventory_Ratio + \beta_{20} Client_Age + \beta_{21} Share_Diffusion + \beta_{22-28} \sum_{i=1}^7 Years + \epsilon
 \end{aligned}$$

where:

²² In an (untabulated) sensitivity test, I rematch the litigated auditors to non-litigated auditors based on total assets audited in the year prior to litigation, but I also require the control (i.e. non-litigated auditor) to be of the same firm name.

²³ This screen eliminates four litigated and non-litigated audit offices from my sample.

²⁴ I vary this time span in subsequent sensitivity analyses.

²⁵ The number of observations will vary according to data availability for each of my empirical models.

Litig = an indicator set to 1 if the misstatement²⁶ results in auditor litigation in any subsequent year, and 0 otherwise;

Auditor Characteristics:

Fees = the natural logarithm of the total non-audit fees (*LFees*) or the ratio of non-audit fees to total fees (*Fee_Ratio*) charged to the client in the misstated fiscal year;

Tenure = the number of consecutive years the client had retained their current auditor as of the misstatement date;

BigN = an indicator set to 1 if the auditor engaged during the misstatement was a Big N auditor, and 0 otherwise;

Sox = an indicator set to 1 if the restatement is disclosed after July 31, 2002, and 0 otherwise;

Misstatement Characteristics:

Revenue = an indicator set to 1 if the misstatement includes a revenue recognition issue, and 0 otherwise;

Num_Issues = the number of accounting rule (i.e., GAAP/FASB) application failures identified in the misstatement;

Fraud = an indicator set to 1 if the misstatement includes fraud, irregularities, or misrepresentations, and 0 otherwise;

Misstate_Length = the number of days between the misstatement period beginning and ending date;

Price_Change = the three-day market-adjusted return around the misstatement disclosure date based on a value-weighted market index²⁷;

Reg_Invest = an indicator set to 1 if the SEC, PCAOB, or another regulatory body is investigating the registrant, and 0 otherwise;

Time_Lapse = the number of days between the restatement disclosure date and the misstatement period ending date;

Client Characteristics:

Client_Size = the natural logarithm of the client's total assets;

²⁶ I identify restatements of annual financial statement disclosed from January 1, 2000 through December, 31, 2007 in the Audit Analytics database and determine which prior year's financial statements were misstated. The misstatement is determined by the date on the initial financial statements rather than by the date of the restatement.

²⁷ Raw returns yield directly comparable results.

- Bankrupt_Delist* = an indicator set to 1 if the client went bankrupt or delisted from the stock exchange within 365 days of the issuance of the misstated financial statements, and 0 otherwise;
- Merger* = an indicator set to 1 if the client went through a merger in the year prior to the misstatement, and 0 otherwise;
- IPO* = an indicator set to 1 if the client issued an IPO within three years²⁸ prior to the beginning of the misstated time period, and 0 otherwise;
- Sales_Growth* = the client's total sales less the client's prior year total sales divided by the client's prior year total sales²⁹;
- Lit_Ind* = an indicator set to 1 if the client operates in an industry with a high incidence of shareholder litigation³⁰, and 0 otherwise;
- Receivables_Ratio* = the client's total account receivables divided by the client's total assets;
- Inventory_Ratio* = the client's total inventory divided by the client's total assets;
- Client_Age* = the number of years the client has been on Compustat since 1974;
- Share_Diffusion* = the number of common shares outstanding divided by the number of common shareholders;
- and
- Years* = year dummies (i.e., indicators set to 1 if the client's fiscal year-end falls in 2000 - 2007, respectively, and 0 otherwise).

My main variables of interest are the auditor characteristics of the misstatement: *Fees*, *Tenure*, *BigN*, and *Sox*. I include the magnitude or proportion of engagement fees comprised of non-audit service fees (*Fees*) because prior research suggests that the perception of auditor independence may be affected by the amount of non-audit services provided by an engaged auditor (Hay et al. 2006). I include *Tenure* to assess whether the positive relationship between auditor tenure and perceived audit quality (Ghosh and Moon 2005) influences auditor culpability for past misstatements. Consistent with Palmrose and Scholz (2004), I include a Big N (*BigN*) indicator variable because Palmrose (1988) finds that Big N auditors

²⁸ Consistent with Palmrose and Scholz (2004), I choose a three year time period because this represents the statute of limitations for auditor legal liability under the Securities Act of 1933.

²⁹ I winsorize *Sales_Growth* to the one and 99 percentiles to reduce the influence of outliers.

³⁰ Consistent with Francis et al. (1994), I identify the biotechnology industry (SIC codes 2833-2836, 8731-8734), computer industry (SIC codes 3570-3577, 7370-7374), electronic industry (SIC codes 3600-3674), and retailing industry (SIC codes 5200-5961) as an industry with a high incidence of shareholder litigation.

have a lower rate of litigation than non-Big N auditors. I also investigate whether the amount of responsibility assigned to an auditor for a past misstatement varies following the Sarbanes Oxley Act (*Sox*).

I also examine client characteristics and misstatement-specific characteristics that could be associated with the likelihood that the misstatement results in auditor litigation. These variables primarily account for the severity of the misstatement and are similar to those included in Palmrose and Scholz (2004). For the purpose of brevity, Panel A of Table 1 provides a summary of all variables used in my empirical model including an expected association with the dependent variable as well as a reference to justify its inclusion in my model.

<INSERT TABLE 1>

Effect of Auditor Litigation on Subsequent Auditor Behavior

Auditor conservatism has been defined as an “auditor’s preference for income-decreasing accounting choices” (Kim et al. 2003, p. 327). Because accrual-based earnings involve estimates about future events and these estimates are jointly determined by a client and its auditor, I use client-specific discretionary accruals as my first measure of changes in auditor behavior. I predict that litigation will result in increased auditor conservatism and that this conservatism will be evidenced by an increase in an auditor’s preference for income-decreasing discretionary accruals across an office-wide client portfolio (that excludes the litigated client). I estimate the client-specific discretionary component of total accruals using a performance-adjusted modified Jones model. Following Kothari et al. (2005), the model is estimated by year and 2-digit SIC industry for all observations available in Compustat:³¹

$$Total_AC/TA_{t-1} = \beta_0 + \beta_1 I/TA_{t-1} + \beta_2 (\Delta Sales_t - \Delta AR_t)/TA_{t-1} + \beta_3 PPE_t/TA_{t-1} + \beta_4 ROA + \varepsilon \quad (2)$$

where:

Total_AC = total accruals (Income before extraordinary – adjusted operating cashflows) (Cahan and Zhang 2006);

TA = total assets;

³¹ I eliminate industry-year combinations that have fewer than ten firm-year observations. I trim all inputs to the one and 99 percentiles to reduce the influence of outliers.

<i>Sales</i>	= total sales;
<i>AR</i>	= accounts receivable;
<i>PPE</i>	= property, plant, and equipment;
<i>ROA</i>	= net income/total assets;
and	
ε	= total discretionary accruals (<i>DAC</i>).

My empirical tests use both the signed (*Sign_DAC* or *Pos_DAC*) discretionary accruals and the absolute value (*Abs_DAC*) of total discretionary accruals (*DAC*). I examine the signed discretionary accruals because I expect auditors engaged in conservative behavior may have a preference for income-decreasing accruals rather than income-increasing accruals. I examine absolute value of discretionary accruals because this measure should capture the magnitude of financial reporting decisions regardless of the directional effect of those decisions (Klein 2002). Specifically, I estimate the following ordinary least squares (OLS) regression model:

$$Accr = \beta_0 + \beta_1 Lit + \beta_2 Post + \beta_3 Lit*Post + \beta_4 BigN + \beta_5 Client_Size + \beta_6 OCF \quad (3) \\ + \beta_7 Abs_TAC + \beta_8 Lev + \beta_9 Client_Age + \beta_{10} Tenure + \beta_{11} Prior_AA + \beta_{12} Pr_Bank + \beta_{13} \\ Chg_NI + \beta_{14} New_Fin + \beta_{15} Loss + \beta_{16} Growth + \beta_{17-31} \sum_{i=1}^{1-15} Industry + \varepsilon$$

where:

<i>Accr</i>	= the absolute value (<i>Abs_DAC</i>) or signed (<i>Sign_DAC</i> or <i>Pos_DAC</i>) ³² client-specific estimate of discretionary accruals using a performance-adjusted modified Jones model ³³ ;
<i>Lit</i>	= an indicator variable set to 1 if the financial statements were audited by a litigated auditor, and 0 otherwise;
<i>Post</i>	= an indicator variable set to 1 if the financial statements were issued in the year following litigation ³⁴ , and 0 otherwise;
<i>Lit*Post</i>	= an interaction of <i>Lit</i> and <i>Post</i> ;

³² For the absolute value or positive discretionary accrual analysis, I use a truncated tobit regression which employs a lower bound of zero for the discretionary accrual values. Utilizing an ordinary least squares (OLS) approach would lead to estimates biased toward zero (Greene 2003).

³³ See Model 3 for a description of the performance-adjusted modified Jones model. I trim *Accr* to the one and 99 percentiles to reduce the influence of outliers.

³⁴ I identify the litigation date as the date the wrongdoing becomes public knowledge as disclosed in the Audit Analytics database.

Accruals Control Variables:

- BigN* = an indicator set to 1 if the engaged auditor was a Big N auditor, and 0 otherwise;
- Client_Size* = the natural logarithm of the client's total assets;
- OCF* = the client's cash flows from operations scaled by the client's prior year total assets;
- Abs_TAC* = the absolute value of the client's total accruals scaled by the client's prior year total assets;
- Lev* = the client's ratio of total debt to total assets;
- Client_Age* = the total number of years for which total assets was reported for the client in COMPUSTAT since 1974;
- Tenure* = the total number of consecutive years that the client has retained their current auditor as of the financial statement date;

Litigation Risk Control Variables:

- Prior_AA* = an indicator set to 1 if the client's engaged auditor was Arthur Andersen during 2001 or 2002, and 0 otherwise;
- Pr_Bank* = the Hopwood et al. (1994) probability of bankruptcy score;
- Chg_NI* = the client's net income less the client's prior year net income divided by the client's prior year net income;
- New_Fin* = an indicator set to 1 if the client issued new shares equal to or greater than 10 percent of the shares outstanding at the beginning of the year, and 0 otherwise;
- Loss* = an indicator set to 1 if the client reported a loss, and 0 otherwise;
- Growth* = the client's market value of common equity / the client's book value of common equity at the beginning of the year;
- and
- Industry* = industry dummies (i.e., indicators set to 1 for each of fifteen 2-digit SIC industries, and 0 otherwise).

My main variables of interest are *Lit*, *Post*, and *Lit*Post*. The coefficient on *Lit* estimates the difference in discretionary accruals between clients of litigated and non-litigated auditors *prior* to litigation. The coefficient on *Post* estimates the change in discretionary accruals following litigation for clients of non-

litigated auditors. The coefficient on *Lit*Post* estimates the difference in the constraint of absolute value and signed discretionary accruals post-litigation for litigated auditors versus non-litigated auditors. A negative coefficient on *Lit*Post* would support my third hypothesis and would indicate a greater constraint of absolute value and signed discretionary accruals post-litigation for litigated auditors versus non-litigated auditors. In addition, a negative coefficient on the joint test for *Post + Lit*Post* would indicate a decrease in absolute value and signed discretionary accruals following litigation for *litigated* auditors. A negative coefficient on the joint test for *Lit + Lit*Post* would indicate that following litigation the total magnitude of absolute value and signed discretionary accruals is smaller for litigated versus non-litigated auditors. I include numerous control variables from the prior literature. Again, for the purpose of brevity, Panel C of Table 1 provides a summary of all variables used in my empirical model including an expected association with the dependent variable as well as a reference to justify its inclusion in my model.

While litigation might induce an auditor to *report* more conservatively, it may also induce an auditor to *act* more conservatively by increasing auditor effort (Thoman 1996). In order to examine the effect of litigation on auditor effort, I examine an auditor's decision to increase the amount of time spent to complete an audit. I use the audit report lag, defined as the number of days between the client's fiscal year-end and the client's audit report date, as my proxy for auditor effort. Specifically, I estimate the following negative binomial regression model³⁵:

$$Arl = \beta_0 + \beta_1 Lit + \beta_2 Post + \beta_3 Lit*Post + \beta_4 BigN + \beta_5 Client_Size + \beta_6 Lag_Arl + \beta_7 Busy + \beta_8 Restate + \beta_9 Qualified + \beta_{10} EI + \beta_{11} ROA + \beta_{12} Prior_AA + \beta_{13} Pr_Bank + \beta_{14} Chg_NI + \beta_{15} New_Fin + \beta_{16} Loss + \beta_{17} Growth + \beta_{18-32} \sum_{i=1}^{1-15} Industry + \epsilon \quad (4)$$

where:

Arl = the number of days between the client's fiscal year-end and the client's audit report date;

Lag_Arl = the number of days between the client's *prior* fiscal year-end and the client's *prior* audit report date;

Busy = an indicator set to 1 if the client's fiscal year ends in December, and 0 otherwise;

³⁵ Because the ARL is a count variable and the variance within my sample is greater than the mean of my sample, the negative binomial regression model is most appropriate for my data (Long and Freese 2006). Results are robust when the analysis is performed with the traditional OLS model.

- Restate* = an indicator set to 1 if financial statements for any prior period were restated in the current period, and 0 otherwise;
- Qualified* = an indicator set to 1 if the audit opinion is qualified³⁶, and 0 otherwise;
- EI* = an indicator set to 1 if the financial statements include at least one extraordinary item, and 0 otherwise;
- ROA* = net income divided by total assets;

and all other variables are as defined above.

Consistent with the accruals analysis, my main variables of interest are *Lit*, *Post*, and *Lit*Post*. I also include numerous control variables from the prior literature. Again, for the purpose of brevity, Panel C of Table 1 provides a summary of all variables used in my empirical model including an expected association with the dependent variable as well as a reference to justify its inclusion in my model. In sum, I examine the occurrence and outcome of auditor litigation related to financial statement misstatements and the effect of auditor litigation on subsequent auditor behavior. My aim is to better understand the role of litigation on the auditing profession.

EMPIRICAL RESULTS

Descriptive Statistics: Financial Statement Misstatements Resulting in Litigation

Table 3 presents descriptive statistics for my two samples. Panel A presents summary statistics for the continuous variables and discrete variables in my financial statement misstatement sample. The distribution of non-audit fees (*Non-Audit_Fees*) and total assets audited (*Client_Size*) is right-skewed so I use the natural logarithm of these values in my multivariate empirical tests. The univariate tests presented in Table 3 indicate that misstatements are more likely to result in auditor litigation when misstatements are associated with a greater amount and proportion of non-audit fees (*Non-Audit_Fees*). In addition, the univariate tests in Table 3 indicate that misstatements are more likely to result in litigation when misstatements are more severe. Specifically, the univariate tests in Table 3 indicate that misstatements are more likely to result in litigation when the misstatements have more accounting application (i.e.,

³⁶ I identify qualified opinions as all adverse, qualified, and going concern audit opinions available in the Compustat and/or Audit Analytics databases.

FASB/GAAP) failures (*Num_Issues*), a greater stock price decline at the misstatement disclosure date (*Price_Change*), a revenue recognition issue (*Revenue*), and a higher incidence of fraud (*Fraud*) and/or a regulatory investigation (*Reg_Invest*). Panel B presents summary statistics for the criterion I use to match litigated and non-litigated audit offices. Panel B indicates that the litigated audit offices used in my empirical tests are slightly larger than the non-litigated audit offices; however, the difference is not statistically significant.

<INSERT TABLE 3>

Multivariate Results: Financial Statement Misstatements Resulting in Litigation

Table 4 presents the results of model (1), which estimates the likelihood that a financial statement misstatement results in auditor litigation. This model is estimated for 1,673 observations, consisting of 65 misstatements that resulted in auditor litigation and 1,608 misstatements that did not result in auditor litigation. Among other characteristics, the analysis includes an investigation of the impact of the magnitude of non-audit service fees (i.e., first two columns) and the proportion of non-audit service fees (i.e., second two columns) on the likelihood that a misstatement results in auditor litigation. The area under the receiver operating characteristic (ROC) curve is 86 percent for both regressions, which suggests that the logistic model has excellent discrimination.³⁷

<INSERT TABLE 4>

Regarding tests of the first hypothesis, I find that misstatements associated with engagement fees that consist of a greater magnitude of non-audit fees (*LFees*) or a greater proportion of non-audit fees (*Fee_Ratio*) are more likely to result in auditor litigation. This suggests that the responsibility assigned to auditors for past misstatements might be related to the types of services auditors provide to misstating clients.³⁸ Consistent with Palmrose (1988), I find that misstatements disclosed by Big N auditors are less

³⁷ The ROC curve is a graphical plot of the sensitivity versus specificity for a binary classification as a discrimination threshold is varied. An area under the ROC curve of 100 (50) percent would be completely informative (uninformative). Hosmer and Lemeshaw (2000) suggests that an area greater than 70 (80) percent represents acceptable (excellent) discrimination.

³⁸ In an additional (untabulated) test, an interactive model reveals that the relationship between the magnitude and/or proportion of non-audit fees and auditor litigation is negative (positive) in the pre-(post-)SOX time period. This is consistent with Ball (2008) who suggests that the perception that non-audit fees impair auditor independence may

likely than misstatements disclosed by non-Big N auditors to result in auditor litigation. However, the coefficients on *Sox* and *Tenure* are not significant. Thus, I do not find support for my second hypothesis.

Consistent with Palmrose and Scholz (2004), I find that misstatements that include a revenue recognition issue (*Revenue*), misstatements with a greater number of accounting rule application (i.e., GAAP/FASB) failures (*Num_Issues*), misstatements disclosing the presence of fraud or irregularities (*Fraud*), and misstatements that have a greater stock price decline at the misstatement disclosure date (*Price_Change*) are more likely to result in auditor litigation. I also find that the coefficient on *Reg_Invest* is positive and significant, suggesting that auditor litigation may be more likely when the misstating client is experiencing a regulatory investigation. These results suggest that misstatement severity is a major determinant of auditor litigation.³⁹ Similar to Palmrose and Scholz (2004), I find that the number of days restated (*Misstate_Length*) is not significantly associated with auditor litigation. I also do not find that a significant relationship exists between auditor litigation and the length of time between the misstatement disclosure date and misstatement period-ending date (*Time_Lapse*).

With respect to client characteristics, I find that the coefficient on client size (*Client_Size*) is positive and significant, suggesting that misstatements of larger clients are more likely to result in auditor litigation. I also find that misstatements associated with clients that went bankrupt or delisted from the stock exchange shortly following the misstatement (*Bankrupt_Delist*) are more likely to result in auditor litigation. These findings are similar to Palmrose and Scholz (2004) who find a positive but insignificant association between these variables and auditor litigation. In addition, I find that misstatements issued by older clients (*Client_Age*) are less likely to result in auditor litigation. However, I do not find the coefficients on any other client characteristic variables to be significantly associated with the likelihood

have shifted following SOX. These results are robust to a seemingly unrelated estimation technique that allows me to examine coefficients on all independent variables between the pre- and post-SOX time period.

³⁹ Because the severity of restatements has decreased from 1997 – 2007 (Scholz 2008), in an untabulated analysis, I limit my analysis to misstatements that meet any of the following conditions: (1) the misstatement is associated with a revenue recognition issue; (2) the misstatement disclosed the presence of fraud or irregularities; (3) the misstating client experienced a regulatory investigation; (4) the number of accounting application failures disclosed in the misstatement was in the upper quartile for the sample; (5) the three-day market-adjusted return around the misstatement disclosure date was in the lower quartile for the sample. My results are largely consistent. Specifically, all the coefficients retain their sign and significance except that the coefficients on *Revenue* and *Num_Issues* become insignificant, and the coefficient on *Sox* becomes positive and marginally significant.

that a misstatement results in auditor litigation. Overall, my results suggest that several auditor, misstatement, and client characteristics are important in predicting auditor misstatement-based litigation.⁴⁰

Multivariate Results: Effect of Auditor Litigation on Subsequent Auditor Behavior

Table 5 and 6 present the results of Model (4) which estimates signed (Panel A and Panel B) and absolute value (Panel C) client discretionary accruals reported by clients of the litigated and non-litigated auditors in the two years surrounding litigation.⁴¹ This model investigates whether the magnitude of post-litigation discretionary accruals reported by clients of litigated auditors differs from the magnitude of post-litigation discretionary accruals reported by clients of non-litigated auditors. Table 5 presents the results when litigated auditors are matched to non-litigated auditors based on total assets audited in the year prior to litigation. Table 6 presents the results when litigated auditors are matched to non-litigated auditors based on total clients audited in the year prior to litigation.

Table 5 indicates that prior to litigation there was no significant difference between the discretionary accruals reported by clients of litigated auditors and the discretionary accruals reported by clients of non-litigated auditors (i.e., the coefficient on *Lit* is insignificant in all three panels). The results also indicate that there was no change following litigation in the signed and absolute value discretionary accruals reported by clients of non-litigated auditors (i.e., the coefficient on *Post* is insignificant in Panel A and Panel C of Table 5). However, the coefficient on *Post* is negative and marginally significant in Panel B of Table 5 indicating that the magnitude of positive discretionary accruals decreased in the year following litigation for non-litigated auditors. In Table 5, the coefficient on the interaction variable, *Lit*Post*, is insignificant (in all three panels) which indicates that, on average, there is no difference in the constraint of absolute value and signed discretionary accruals following litigation for litigated auditors versus non-litigated auditors. However, I find that, on average, there has been a significant decrease in

⁴⁰ In an additional (untabulated) test, I examine the likelihood of auditor litigation to result in an auditor settlement. I find that misstatement severity and the size of the plaintiffs' claims are the primary drivers of auditor settlements resulting from misstatement-based litigation.

⁴¹ Because my sample includes multiple observations for a given client, my test statistics are based on Roger's standard errors which are White standard errors adjusted for possible correlation of residuals within firm clusters (Petersen 2008).

the signed and positive accruals following litigation for *litigated* auditors, as the joint test for $Post + Lit*Post$ is negative and marginally significant in Panel A and Panel B of Table 5. Taken together, the results, when litigated auditors are matched to non-litigated auditors based on the assets audited in the year prior to litigation, do not support my third hypothesis. Rather, they suggest that following litigation *all* auditors constrained positive accruals, but only litigated auditors constrained signed discretionary accruals. In addition, the joint test for $Lit + Lit*Post$ is insignificant in all panels of Table 5 which provides little evidence that following litigation the total magnitude of absolute value and signed discretionary accruals differs between litigated and non-litigated auditors.

<INSERT TABLE 5>

In Table 6, I present results based on models where the matching procedure is based on the number of clients audited in the year prior to litigation. In contrast to the results presented in Table 5, I find that the coefficient on $Lit*Post$ is negative and significant in Panels A and B of Table 6. These findings support my third hypothesis and indicate that, on average, there is a greater constraint of signed and positive client-reported discretionary accruals following litigation for litigated auditors versus non-litigated auditors. In addition, when the match is based on the number of clients audited in the year prior to litigation, I do not find a change in the discretionary accruals reported by clients of non-litigated auditors (i.e., the coefficient on $Post$ is insignificant in all three panels in Table 6). Rather, I find that there has been a significant decrease in the absolute value and signed accruals following litigation for *litigated* auditors, as the joint test for $Post + Lit*Post$ is negative and marginally significant in all panels of Table 6. In addition, the joint test for $Lit + Lit*Post$ is significant in panel B of Table 6 which provides evidence that following litigation, the total magnitude of positive discretionary accruals is smaller for litigated versus non-litigated auditors.

<INSERT TABLE 6>

To summarize the results from Table 5 and 6 as they pertain to the third hypothesis, audit firms appear to respond to litigation involving a single client by requiring more income-decreasing financial

reporting from other clients serviced by the same office.⁴² This finding suggests that litigation may, in fact, cause auditors to change their behavior in future reporting periods.⁴³

With respect to the control variables, in both Panel B and Panel C of Table 5 and Panel A of Table 6, I find a negative and significant coefficient on *BigN*. This is consistent with Becker et al. (1998) and indicates that clients of Big N auditors report, on average, a smaller amount of discretionary accruals. In addition, in all panels in both tables, I find that, larger clients (*Client_Size*) report discretionary accruals of smaller magnitude. Consistent with prior literature, I find a negative association between discretionary accruals and operating cash flows (*OCF*) and a positive association between discretionary accruals and leverage (*Lev*). In addition, I find that a client's accrual generating potential does affect client reported discretionary accruals as the coefficient on *Abs_TAC* is significant in all three columns in both tables. Consistent with Cahan and Zhang (2006), I find that former Arthur Andersen clients report signed and absolute value discretionary accruals of smaller magnitude (i.e., the coefficient on *Prior_AA* is negative and significant in Panel B and Panel C of Table 5). In addition, I find that clients who recently issued new equity report a greater amount of positive (Panel B of Table 5) and absolute value (Panel C of Table 5) discretionary accruals. This is consistent with prior literature that finds that managers have an incentive to increase earnings prior to equity offers (Rangan 1998; Teoh et al. 1998). I also find that *Growth* clients evidenced by a greater market-to-book ratio report a greater (smaller) amount of absolute value (signed) discretionary accruals. This is consistent with Smith and Watts (1992) who find that managers of growth clients tend to have more accounting discretion. However, contrary to my expectation, I find that financially distressed clients (*Pr_Bank* and *Loss*) report discretionary accruals (all panels) of smaller magnitude. This unexpected result may be due to more auditor constraint of

⁴² However, this result is limited to the matching procedure that assigns a non-litigated auditor to a litigated auditor based on total clients audited in the year prior to litigation.

⁴³ As expected, when I limit my analysis to include only litigated auditors (and assigned non-litigated auditors) with meritorious litigation (i.e., litigation that does not result in an auditor dismissal) my results are stronger. Specifically, the coefficient on my interaction variable, *Lit*Post*, becomes negative and significant. This finding suggests that the effect of litigation on auditor behavior is slightly more evident when more meritorious lawsuits are analyzed.

discretionary accruals driven by the increased litigation risk associated with these clients. Overall, my results on the control variables are largely consistent with the prior literature.

In an untabulated analysis, I examine the discretionary accruals reported by clients of litigated and non-litigated auditors across a larger time period (i.e., two, three, or four years prior to and subsequent to the litigation). As I lengthen the time span included in my analysis, I find that non-litigated auditors constrain client discretionary accruals while litigated auditors do not constrain discretionary accruals (and may even allow them to increase). This finding indicates that non-litigated auditors constrain client discretionary accruals over time, and is consistent with prior literature that finds an increase in financial reporting conservatism since the passage of SOX (Lobo and Zhou 2006; Cohen et al. 2008). This finding also suggests that the effect of auditor litigation on auditor behavior may be limited to a relatively brief time span.

Table 7 and Table 8 present the results of Model (4) which tests for a relation between auditor litigation and the audit report lag of subsequent audit engagements.⁴⁴ This model investigates whether the length of time auditors spend to complete post-litigation audit engagements across an office-wide client portfolio (that excludes the litigated client) differs for litigated versus non-litigated auditors. Table 7 presents the results when litigated auditors are matched to non-litigated auditors based on total assets audited in the year prior to litigation. Table 8 presents the results when litigated auditors are matched to non-litigated auditors based on total clients audited in the year prior to litigation.

Table 7 indicates that there is no significant difference between the ARL for clients of litigated auditors and clients of non-litigated auditors prior to litigation (i.e., the coefficient on *Lit* is insignificant). I find that there is no significant increase in the ARL following litigation for clients of non-litigated auditors (i.e., the coefficient on *Post* is insignificant in Table 7). However, I find that the coefficient on *Lit*Post* is positive and significant which supports the fourth hypothesis and indicates that the ARL following litigation is, on average, greater for clients of litigated auditors versus clients of non-litigated

⁴⁴ Because my sample includes multiple observations for a given client, my test statistics are based on Roger's standard errors which adjust for possible correlation of residuals within firm clusters (Peterson 2006).

auditors. Further, the joint test on $Post + Lit*Post$ is positive and significant which confirms that clients of litigated auditors have longer ARLs after litigation than they had prior to litigation. Overall, the results in Table 7 provide support for the fourth hypothesis that auditor litigation is followed by more auditor effort, as evidenced by an increased audit report lag for litigated auditors.

<INSERT TABLE 7>

In Table 8, I find a significant increase in the ARL following litigation for clients of litigated auditors (i.e., the joint test on $Post + Lit*Post$ is positive and significant) and for clients of non-litigated auditors (i.e., the coefficient on $Post$ is positive and significant). However, I find the coefficient on my interaction variable, $Lit*Post$, is insignificant which indicates that the increase in the ARL following litigation is not, on average, greater for clients of litigated auditors versus clients of non-litigated auditors. Thus, the results in Table 8 do not support my fourth hypothesis. Rather, they suggest that following litigation the ARL increased for clients of *all* auditors. Overall, the results from Table 7 and Table 8 provide some support for my fourth hypothesis that auditor litigation is followed by more auditor effort evidenced by an increased audit report lag for litigated auditors.

<INSERT TABLE 8>

With respect to my control variables, the coefficients are largely consistent in direction and significance with those previously documented in the literature. I find that the auditor characteristics associated with increased audit complexity are positively associated with the ARL. Specifically, in Table 7, I find that financial statement restatements (*Restate*), qualified audit opinions (*Qualified*), current year losses (*Loss*), and financially distressed clients (*Pr_Bank*) are all associated with longer ARLs. In addition, consistent with Simnett et al. (1995), I find that prior year ARL (*Lag_Arl*) is an important determinant of the current year ARL indicating that ARLs are often sticky from year to year. I find that the audit report lag is negatively related to firm size (*Client_Size*) in Table 7 which is consistent with Ashton et al. (1989). Lastly, while I made no directional prediction, I find that prior Arthur Andersen clients (*Prior_AA*) are associated with shorter ARLs. Overall, my results on the control variables are largely consistent with the prior literature.

In an untabulated analysis, I examine the ARL for clients of litigated and non-litigated auditors across a larger time period (i.e., two, three, or four years prior to and subsequent to the litigation). As I lengthen the time span, I find that the ARL for clients of both litigated and non-litigated auditors increases following litigation; however, I find evidence that the increase is greater for clients of litigated auditors. This finding suggests that the effect of auditor litigation on auditor effort may *not* be limited to a relatively brief time span. In sum, the results from Table 5 through Table 8 indicate that auditor litigation is followed by more conservative auditor behavior.⁴⁵

CONCLUSION

Motivated by recent calls to limit auditor legal liability and the potential for auditor legal liability to act as a deterrence mechanism against non-GAAP financial reporting, I examine the occurrence of auditor litigation related to annual financial statement misstatements and the effect of auditor misstatement-based litigation on subsequent auditor behavior. I find that several measures of misstatement severity are positively associated with the likelihood that a misstatement results in auditor litigation. Specifically, I find that auditor litigation is more likely to follow misstatements that are associated with fraud, regulatory investigations, and/or larger stock price declines at the misstatement disclosure date. In addition, I find that litigation is more likely to follow misstatements associated with a greater number of accounting rule application (i.e., GAAP/FASB) failures, especially when the failures involve revenue recognition. With respect to auditor characteristics, I find that the likelihood that a misstatement results in auditor litigation is greater when engagement fees consist of a greater magnitude or a greater proportion of non-audit service fees. This result suggests that the amount of non-audit services provided by an auditor may affect the perceived auditor independence and perceived audit quality associated with accounting misstatements. My tests do not find auditor tenure to significantly influence the likelihood that a misstatement results in auditor litigation. However, my tests do reveal that,

⁴⁵ My results are similar but the coefficients on my test variables are less significant when I include, in my empirical tests, offices with multiple lawsuits during my time period. This suggests that my empirical tests are better able to isolate the effect of litigation on subsequent auditor behavior when the classification of observations into pre- and post-litigation periods is clearer.

after controlling for other determinants, misstatements by Big N auditors are less likely to result in litigation than misstatements by non-Big N auditors. These findings suggest that the perception that longer auditor-client relationships are associated with higher quality audits may not apply to litigation associated with misstatements. However, the perception that Big N auditors provide higher quality audits than non-Big N auditors may apply to litigation associated with misstatements. Overall, these results suggest that misstatement severity *and* several auditor characteristics affect auditor culpability for past misstatements.

With respect to the effect of litigation on subsequent auditor behavior, I find evidence that auditors employed at a litigated office engage in more conservative behavior following litigation. Specifically, I find that, in the year following litigation, litigated auditors are more likely than non-litigated auditors to constrain signed and positive discretionary accruals across their office-wide client portfolio (that excludes the litigated client). My results suggest that, following litigation, auditors require more conservative financial reporting from their clients by constraining client income-increasing financial reporting behavior. In addition to the discretionary accruals results, I find that in the year following litigation, litigated auditors have longer post-litigation ARLs than do non-litigated auditors. These findings suggest that litigation increases the amount of time auditors spend on subsequent audit engagements (again, across the auditor's office-wide client portfolio that excludes the litigated client). Combined, these findings suggest that with respect to the reporting of accruals and the time spent on an audit, auditor litigation does seem to influence the behavior of auditors.

My study provides evidence that may be useful to regulators and auditors. Specifically, when assessing the current level of auditor legal liability, regulators may wish to understand the circumstances under which auditors are held liable for past audit failures and how litigation may affect subsequent auditor behavior (which ultimately may impact financial reporting quality). Because of the reputational and financial cost of lawsuits, auditors may be interested in these findings because they address the amount of accountability assigned to an auditor for a past financial statement misstatement. My results indicate that the composition of engagement fees and misstatement severity are primary drivers of

misstatement-based auditor litigation. Although auditor litigation is a relatively rare occurrence, my study also provides evidence that such litigation may, in fact, have the potential to temporarily deter future non-GAAP reporting. Specifically, my results indicate that auditor behavior becomes more conservative in the year following litigation but, on average, does not change over a longer time span. These results suggest that auditor litigation may play a role in maintaining audit quality.

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TABLE 1
Variable Definitions

Panel A: Variables Used in the Analysis of Auditor Litigation Resulting from Misstatements (variables used in Model 1):				
<i>Variable Name</i>	<i>Variable Type</i>	<i>Expectation</i>	<i>Definition</i>	<i>Reference</i>
<i>Bankrupt_Delist</i>	Control	+	= an indicator set to 1 if the client went bankrupt or delisted from the stock exchange within 365 days of the issuance of the misstated financial statements, and 0 otherwise.	Ball (2008); Palmrose and Scholz (2004)
<i>BigN</i>	Test	?	= an indicator set to 1 if the auditor engaged during the misstatement was a Big N auditor, and 0 otherwise.	Palmrose (1988); Palmrose and Scholz (2004)
<i>Client_Age</i>	Control	-	= the number of years the client has been on Compustat since 1974.	
<i>Client_Size</i>	Control	+	= the natural logarithm of the client's total assets.	Palmrose and Scholz (2004)
<i>Fraud</i>	Control	+	= an indicator set to 1 if the misstatement includes fraud, irregularities, or misrepresentations, and 0 otherwise.	Palmrose and Scholz (2004)
<i>Inventory_Ratio</i>	Control	+	= the client's total inventory divided by the client's total assets.	Stice (1991)
<i>IPO</i>	Control	+	= an indicator set to 1 if the client issued an IPO within three years prior to the beginning of the misstated time period, and 0 otherwise.	Palmrose and Scholz (2004); Billings and Lewis (2008)
<i>LFees</i>	Test	+	= the natural logarithm of the total non-audit fees charged to the client in the misstated fiscal year.	Hay et al. (2006)
<i>Litig</i>	Dependent	NA	= an indicator set to 1 if the misstatement results in auditor litigation in any subsequent year, and 0 otherwise.	NA
<i>Merger</i>	Control	+	= an indicator set to 1 if the client went through a merger in the year prior to the misstatement, and 0 otherwise.	St. Pierre and Anderson (1994)
<i>Misstake_Length</i>	Control	?	= the number of days between the misstatement period beginning and ending date.	Palmrose and Scholz (2004)
<i>Fees</i>	Test	+	= the natural logarithm of the total non-audit fees (<i>LFees</i>) or the ratio of non-audit fees to total fees (<i>Fee_Ratio</i>) charged to the client in the misstated fiscal year.	Hay et al. (2006)
<i>Fee_Ratio</i>	Test	+	= the ratio of non-audit fees charged to the client in the misstated fiscal year.	Hay et al. (2006)
<i>Num_Issues</i>	Control	+	= the number of accounting rule (i.e., GAAP/FASB) application failures identified in the misstatement.	Palmrose and Scholz (2004)
<i>Price_Change</i>	Control	-	= the three-day market-adjusted return around the misstatement disclosure date based on a value-weighted market index.	Palmrose and Scholz (2004)

<i>Variable Name</i>	<i>Variable Type</i>	<i>Expectation</i>	<i>Definition</i>	<i>Reference</i>
<i>Receivables_Ratio</i>	Control	+	= the client's total account receivables divided by the client's total assets.	Stice (1991)
<i>Reg_Invest</i>	Control	+	= an indicator set to 1 if the SEC, PCAOB, or another regulatory body is investigating the registrant, and 0 otherwise.	Because I expect that a regulatory investigation may be indicative of a more severe restatement
<i>Revenue</i>	Control	+	= an indicator set to 1 if the misstatement includes a revenue recognition issue, and 0 otherwise.	Palmrose and Scholz (2004)
<i>Lit_Ind</i>	Control	+	= an indicator set to 1 if the client operates in an industry with a high incidence of shareholder litigation (SIC codes 2833-2836, 8731-8734, 3570-3577, 7370-7374, 3600-3674, and 5200-5961), and 0 otherwise	Francis et al. (1994); Cahan and Zhang (2006)
<i>Sales_Growth</i>	Control	?	= the client's total sales less the client's prior year total sales divided by the client's prior year total sales.	Stice (1991)
<i>Share_Diffusion</i>	Control	-	= the number of common shares outstanding divided by the number of common shareholders.	To control for the probability that shareholders pursue litigation.
<i>Sox</i>	Test	?	= an indicator set to 1 if the restatement is disclosed after July 31, 2002, and 0 otherwise.	To examine differences following SOX.
<i>Tenure</i>	Test	-	= the number of consecutive years the client had retained their current auditor as of the misstatement date.	Ghosh and Moon (2005)
<i>Time_Lapse</i>	Control	?	= the number of days between the restatement disclosure date and the misstatement period ending date.	Sharp (2007); Billings (2008)
<i>Years</i>	Control	?	= year dummies (i.e., indicators set to 1 if the client's fiscal year-end falls in 2000 - 2007, respectively, and 0 otherwise).	To control for time effects.

Panel B: Variables Used in the Performance-Adjusted Modified Jones Accruals Model (variables used in Model 2):	
<i>Variable Name</i>	<i>Definition</i>
<i>AR</i>	= accounts receivable (Compustat item #2).
<i>PPE</i>	= property, plant, and equipment (Compustat item #7).
<i>ROA</i>	= net income (Compustat item #18) / total assets (Compustat item #6).
<i>Sales</i>	= total sales (Compustat item #12).
<i>TA</i>	= total assets (Compustat item #6).
<i>Total_AC</i>	= total accruals [Income before extraordinary items (Compustat item #123) – adjusted operating cashflows (Compustat item #308 - #124) (Cahan and Zhang 2006).
ε	= total discretionary accruals (<i>DAC</i>).

Panel C: Variables Used in the Analysis of the Effect of Auditor Litigation on Subsequent Auditor Behavior (variables used in Model 3 and Model 4):				
<i>Variable Name</i>	<i>Variable Type</i>	<i>Expectation</i>	<i>Definition</i>	<i>Reference</i>
<i>Abs_TAC</i>	Dependent	NA	= the absolute value of the client's total accruals scaled by the client's prior year total assets.	Becker et al. (1998)
<i>Accr</i>	Dependent	NA	= the absolute value (<i>DAC</i>) or signed (<i>Sign_DAC</i> or <i>Pos_DAC</i>) client-specific estimate of discretionary accruals using a performance-adjusted modified Jones model.	NA
<i>Arl</i>	Dependent	NA	= the number of days between the client's fiscal year-end and the client's audit report date.	Bamber (1993)
<i>BigN</i>	Control	-	= an indicator set to 1 if the engaged auditor was a Big N auditor, and 0 otherwise.	Becker et al. (1998); Leventis et al. (2005)
<i>Busy</i>	Control	+	= an indicator set to 1 if the client's fiscal year ends in December, and 0 otherwise.	Johnson et al. (2002)
<i>Chg_NI</i>	Control	?	= the client's net income less the client's prior year net income divided by the client's prior year net income.	Lee and Mande (2003)

<i>Variable Name</i>	<i>Variable Type</i>	<i>Expectation</i>	<i>Definition</i>	<i>Reference</i>
<i>Client_Age</i>	Control	?	= the total number of years for which total assets was reported for the client in COMPUSTAT since 1974.	Anthony and Ramesh (1992)
<i>Client_Size</i>	Control	?	= the natural logarithm of the client's total assets.	Ashton et al. (1989); Bamber et al. (1993); Cullinan (2003); Stice (1991); Lys and Watts (1994); Reynolds and Francis (2001); Dechow and Dichev (2002)
<i>EI</i>	Control	+	= an indicator set to 1 if the financial statements include at least one extraordinary item, and 0 otherwise.	Whittred (1980); Bamber et al. (1993); Kinney and McDaniel (1993)
<i>Growth</i>	Control	?	= the client's market value of equity divided by the client's book value of common equity at the beginning of the year.	Smith and Watts (1992); Skinner and Sloan (2002)
<i>Industry</i>	Control	NA	= indicators set to 1 for each of eleven 2-digit SIC industries, and 0 otherwise.	Francis et al. (1994); Barth et al. (2001)
<i>Lag_Arl</i>	Control	+	= the number of days between the client's <i>prior</i> fiscal year-end and the client's <i>prior</i> audit report date.	Simnett et al. (1995)
<i>Lev</i>	Control	+	= the client's ratio of total debt to total assets.	DeFond and Jiambalvo (1994)
<i>Lit</i>	Test	?	= an indicator variable set to 1 if the financial statements were audited by a litigated auditor, and 0 otherwise.	NA
<i>Lit*Post</i>	Test	+/-	= an interaction of <i>Lit</i> and <i>Post</i> .	NA
<i>Loss</i>	Control	?	= an indicator set to 1 if the client reported a loss, and 0 otherwise.	DeAngelo et al. (1994); Burgstahler and Dichev (1997); Lee and Mande (2003)
<i>New_Fin</i>	Control	?	= an indicator set to 1 if the client issued new shares equal to or greater than 10 percent of the shares outstanding at the beginning of the year, and 0 otherwise.	Rangan (1998); Teoh et al. (1998); Cahan and Zhang (2006)

<i>Variable Name</i>	<i>Variable Type</i>	<i>Expectation</i>	<i>Definition</i>	<i>Reference</i>
<i>OCF</i>	Control	-	= the client's cash flows from operations scaled by the client's prior year total assets.	Dechow (1994); Sloan (1996)
<i>Post</i>	Test	+/-	= an indicator variable set to 1 if the financial statements were issued following litigation ¹ , and 0 otherwise.	NA
<i>Pr_Bank</i>	Control	?	= the Hopwood et al. (1994) probability of bankruptcy score.	Stice (1991); Cahan and Zhan (2006)
<i>Prior_AA</i>	Control	-	= an indicator set to 1 if the client's engaged auditor was Arthur Andersen during 2001 or 2002, and 0 otherwise.	Cahan and Zhang (2006)
<i>Qualified</i>	Control	+	= an indicator set to 1 if the audit opinion is qualified, and 0 otherwise.	Whittred (1980); Bamber et al. (1993); Kinney and McDaniel (1993)
<i>Restate</i>	Control	+	= an indicator set to 1 if financial statements for any prior period were restated in the current period, and 0 otherwise.	Whittred (1980); Bamber et al. (1993); Kinney and McDaniel (1993)
<i>ROA</i>	Control	-	= net income divided by total assets.	Jaggi and Tsui (1999)
<i>Tenure</i>	Control	-	= the total number of consecutive years that the client has retained their current auditor as of the financial statement date.	Myers et al. (2003)

¹ I identify the litigation date as the date the wrongdoing becomes public knowledge as disclosed in the Audit Analytics database.

TABLE 2
Sample Descriptions

Sample #1: Financial Statement Misstatements Resulting in Litigation²

Annual misstatements disclosed as restatements in the Audit Analytics database from 1/1/01 – 12/31/07	1,673
Annual misstatements that result in litigation as disclosed in the Audit Analytics database as of 1/22/08	65

Sample #2: Effect of Auditor Litigation on Subsequent Auditor Behavior

Auditor office locations affected by misstatement-based litigation as disclosed in Audit Analytics as of 12/31/07 ³	61
Less: Auditor office locations with missing prior year data necessary for matching procedures	(3)
Less: Auditor office locations cited with multiple lawsuits	(13)
Less: Auditor office locations without a similarly sized non-litigated audit office ⁴	(4)
Final sample of litigated auditor office locations:	41

² My empirical tests require data from the Compustat, CRSP, and Thomson Financial SDC databases. My sample consists of only observations with data available from these databases.

³ In four instances, two separate misstatements are combined into a single lawsuit against an auditor. As a result, only 61 unique office locations are affected by misstatement-based litigation.

⁴ I require my control audit office to audit between 50 – 150 percent of the total assets audited by my litigated office.

TABLE 3
Descriptive Statistics
Panel A: Financial Statement Misstatements Resulting in Litigation
N = 1,673 misstatements

	<u>Resulting in Litigation</u>		<u>Not Resulting in Litigation</u>	
	N = 65		N = 1,608	
Continuous Variables	<u>Mean</u>	<u>Median</u>	<u>Mean</u>	<u>Median</u>
<i>Non-Audit_Fees</i> ⁵ (\$)	5,153,122***	836,000**	860,964	186,668
<i>Fee_Ratio</i> (%)	48***	46***	30	27
<i>Tenure</i> (years)	4.6	4	4.7	5
<i>Num_Issues</i>	3.4**	2	2.7	2
<i>Misstate_Length</i> (days)	1,105*	1,003	997	730
<i>Price_Change</i> (%)	-8**	-3**	-0.1	-0.9
<i>Time_Lapse</i> (days)	197*	145	223	159
<i>Client_Size</i> ⁶ (\$)	59,674***	2,013***	4,873	401
<i>Sales_Growth</i> (%)	29	12	21	9
<i>Receivables_Ratio</i> (%)	20**	14*	16	11
<i>Inventory_Ratio</i> (%)	5***	1**	11	5
<i>Client_Age</i> (years)	13*	11	14	13
<i>Share_Diffusion</i> (shares)	84	26	98	19
Discrete Variables	<u>Frequency</u>	<u>Percent</u>	<u>Frequency</u>	<u>Percent</u>
<i>BigN</i>	59*	91	1,373	85
<i>Sox</i>	54***	83	1,513	94
<i>Revenue</i>	23***	35	290	18
<i>Fraud</i>	7***	11	36	2
<i>Reg_Invest</i>	24***	37	196	12
<i>Bankrupt_Delist</i>	5**	8	20	1
<i>Merger</i>	22***	34	314	20
<i>IPO</i>	6	9	95	6
<i>Lit_Ind</i>	17*	26	536	33

Panel B: Auditor Office Matching Characteristics
N = 82 audit office locations

Auditor Office Characteristics	<u>Litigated Auditors</u>		<u>Non-litigated Auditors</u>	
	N = 41		N = 41	
	<u>Mean</u>	<u>Median</u>	<u>Mean</u>	<u>Median</u>
Total Assets Audited in the Prior Year (\$ million) ⁷	108,228 million	58,800 million	101,114 million	59,699 million

*, **, *** indicate that mean/median tests are significant at 10, 5, and 1 percent, respectively. All variables are defined in Table 1.

⁵ Non-audit fees reported in dollars (not in logged value for ease of interpretation).

⁶ Total assets reported in millions of dollars (not in logged value for ease of interpretation).

⁷ Matching litigated auditors to non-litigated auditors based on clients audited in the year prior to litigation results in auditors of equivalent size.

TABLE 4
Logistic Regression: Financial Statement Misstatements Resulting in Litigation

$$\text{Litig} = \beta_0 + \beta_1 \text{Fees} + \beta_2 \text{Tenure} + \beta_3 \text{BigN} + \beta_4 \text{Sox} + \beta_5 \text{Revenue} + \beta_6 \text{Num_Issues} + \beta_7 \text{Fraud} + \beta_8 \text{Misstate_Length} + \beta_9 \text{Price_Change} + \beta_{10} \text{Reg_Invest} + \beta_{11} \text{Time_Lapse} + \beta_{12} \text{Client_Size} + \beta_{13} \text{Bankrupt_Delist} + \beta_{14} \text{Merger} + \beta_{15} \text{IPO} + \beta_{16} \text{Sales_Growth} + \beta_{17} \text{Lit_Ind} + \beta_{18} \text{Receivables_Ratio} + \beta_{19} \text{Inventory_Ratio} + \beta_{20} \text{Client_Age} + \beta_{21} \text{Share_Diffusion} + \beta_{22-28} \sum_{i=1}^7 \text{Years} + \varepsilon \quad (1)$$

Variable	Sign	Analysis Including Non-Audit Fee Magnitude		Analysis Including Non-Audit Fee Proportion	
		Coefficient	Z-Statistic	Coefficient	Z-Statistic
<u>Auditor Characteristics:</u>					
<i>LFees</i>	+	0.36	2.68***	-	-
<i>Fee_Ratio</i>	+	-	-	2.15	2.86***
<i>Tenure</i>	-	0.06	0.64	0.07	0.78
<i>BigN</i>	?	-1.06	-1.90**	-1.04	-1.85**
<i>Sox</i>	?	-0.50	-0.72	-0.61	-0.87
<u>Restatement Characteristics:</u>					
<i>Revenue</i>	+	0.52	1.63**	0.57	1.80**
<i>Num_Issues</i>	+	0.09	1.43*	0.09	1.37*
<i>Fraud</i>	+	0.99	1.76**	1.11	1.97**
<i>Misstate_Length</i>	?	0.00	0.48	0.00	0.51
<i>Price_Change</i>	-	-1.84	-2.45***	-1.81	-2.38***
<i>Reg_Invest</i>	+	0.98	2.83***	0.98	2.82***
<i>Time_Lapse</i>	?	-0.00	-0.89	-0.00	0.32
<u>Client Characteristics:</u>					
<i>Client_Size</i>	+	0.22	1.87**	0.40	4.71***
<i>Bankrupt_Delist</i>	+	2.41	3.96***	2.54	4.19***
<i>Merger</i>	+	0.16	0.49	0.27	0.84
<i>IPO</i>	+	0.30	0.55	0.24	0.67
<i>Sales_Growth</i>	?	0.12	0.50	0.06	0.23
<i>Lit_Ind</i>	+	0.16	0.48	0.22	0.64
<i>Receivables_Ratio</i>	+	1.00	1.26	0.94	1.21
<i>Inventory_Ratio</i>	+	-3.59	-2.14	-3.22	-1.98
<i>Client_Age</i>	-	-0.06	-2.20***	-0.05	-2.11**
<i>Share_Diffusion</i>	-	-0.00	-0.72	-0.00	-0.66
<i>Intercept</i>	N/A	-9.82	-5.25***	-6.98	-4.75***
<i>Years</i>		Year controls included but not tabulated			
<i>N =</i>		1,673		1,673	
<i>Pseudo. R-Square</i>		0.2658		0.2663	
<i>LR Chi-Square Statistic</i>		146.09***		146.36***	
<i>Area under ROC curve</i>		0.8603		0.8611	

*, **, *** indicate significant at 10, 5, and 1 percent, respectively. Tests are one-tailed when signs are predicted. All variables are defined in Table 1.

TABLE 5
Effect of Auditor Litigation on Subsequent Auditor Behavior
Discretionary Accruals reported by Clients⁸
Match Based on Total Assets Audited in the Prior Year

$$Accr = \beta_0 + \beta_1 Lit + \beta_2 Post + \beta_3 Lit*Post + \beta_4 BigN + \beta_5 Client_Size + \beta_6 OCF + \beta_7 Abs_TAC + \beta_8 Lev + \beta_9 Client_Age + \beta_{10} Tenure + \beta_{11} Prior_AA + \beta_{12} Pr_Bank + \beta_{13} Chg_NI + \beta_{14} New_Fin + \beta_{15} Loss + \beta_{16} Growth + \beta_{17-31} \sum_{i=1}^{15} Industry_i + \varepsilon \quad (5)$$

Variable	Panel A: Signed Discretionary Accruals			Panel B: Positive Discretionary Accruals			Panel C: Absolute Value Discretionary Accruals		
	Predicted Sign	Coefficient	T-Stat	Predicted Sign	Coefficient	T-Stat	Predicted Sign	Coefficient	T-Stat
<i>Lit</i>	?	0.0015	0.41	?	-0.0020	-0.44	?	-0.0025	-0.73
<i>Post</i>	-	-0.0037	-0.90	-	-0.0071	-1.40*	-	-0.0023	-0.60
<i>Lit*Post</i>	-	-0.0004	-0.08	-	0.0010	0.17	-	-0.0002	-0.03
<i>BigN</i>	-	-0.0082	-0.45	-	-0.0298	-1.52*	-	-0.0173	-1.61*
<i>Client_Size</i>	?	-0.0021	-1.97**	?	-0.0042	-3.25***	?	-0.0050	-5.19***
<i>OCF</i>	-	-0.4933	-15.41***	-	-0.3488	-13.55***	-	-0.0850	-3.68***
<i>Abs_TAC</i>	?	-0.2247	-4.56***	?	0.1498	2.69***	?	0.2895	9.88***
<i>Lev</i>	+	0.2989	3.88***	+	0.0222	2.48**	+	0.0048	0.65
<i>Client_Age</i>	?	0.0002	0.73	?	0.0001	0.41	?	-0.0003	-1.42
<i>Tenure</i>	-	-0.0006	-0.82	-	0.0001	0.13	-	0.0007	1.26
<i>Prior_AA</i>	-	0.0033	0.82	-	-0.0071	-1.37*	-	-0.0080	-1.86**
<i>Pr_Bank</i>	?	-0.1129	-6.25***	?	-0.1081	-6.48***	?	-0.0337	-2.47**
<i>Chg_NI</i>	?	0.0008	1.76	?	0.0002	0.32	?	-0.0000	-0.09
<i>New_Fin</i>	?	0.0028	0.65	?	0.0085	1.75*	?	0.0093	2.40**
<i>Loss</i>	?	-0.0207	-3.42***	?	-0.0306	-6.57***	?	-0.0181	-4.61***
<i>Growth</i>	?	-0.0022	-2.72***	?	0.0002	0.14	?	0.0036	4.36***
<i>Intercept</i>	N/A	0.03816	1.55	N/A	0.0918	2.25	N/A	0.1221	2.69***
Joint Tests		Coefficient	F-Stat		Coefficient	F-Stat		Coefficient	F-Stat
Post + Lit*Post	-	-0.0041	1.68*	-	-0.0061	2.66**	-	-0.0025	0.72
Lit + Lit*Post	-	0.0011	0.08	-	-0.0010	0.05	-	-0.0026	0.55
N		1,657			731			1,657	
Adj. R-Square		0.6020			-0.2731			-0.1219	

*, **, *** indicate significant at 10, 5, and 1 percent, respectively. Tests are one-tailed when signs are predicted. All variables are defined in Table 1. Industry controls included but not tabulated.

⁸ For the absolute value and positive discretionary accrual analysis, I use a truncated tobit regression which employs a lower (upper) bound of zero for the positive (negative) discretionary accrual values. Utilizing an ordinary least squares (OLS) approach would lead to estimates biased toward zero (Greene 2003).

TABLE 6
Effect of Auditor Litigation on Subsequent Auditor Behavior
Discretionary Accruals reported by Clients⁹
Match Based on Total Clients Audited in the Prior Year

$$Accr = \beta_0 + \beta_1 Lit + \beta_2 Post + \beta_3 Lit*Post + \beta_4 BigN + \beta_5 Client_Size + \beta_6 OCF + \beta_7 Abs_TAC + \beta_8 Lev + \beta_9 Client_Age + \beta_{10} Tenure + \beta_{11} Prior_AA + \beta_{12} Pr_Bank + \beta_{13} Chg_NI + \beta_{14} New_Fin + \beta_{15} Loss + \beta_{16} Growth + \beta_{17-31} \sum_{i=1}^{15} Industry + \varepsilon \quad (5)$$

Variable	Panel A: Signed Discretionary Accruals			Panel B: Positive Discretionary Accruals			Panel C: Absolute Value Discretionary Accruals		
	<u>Predicted</u> Sign	Coefficient	T-Stat	<u>Predicted</u> Sign	Coefficient	T-Stat	<u>Predicted</u> Sign	Coefficient	T-Stat
<i>Lit</i>	?	0.0077	2.14**	?	0.0039	0.91	?	0.0023	0.69
<i>Post</i>	-	0.0046	1.18	-	0.0066	1.31	-	-0.0036	-1.07
<i>Lit*Post</i>	-	-0.0093	-1.74**	-	-0.0133	-2.01**	-	-0.0012	-0.25
<i>BigN</i>	-	-0.0166	-1.39*	-	0.0016	0.15	-	0.0022	0.32
<i>Client_Size</i>	?	-0.0016	-1.45*	?	-0.0034	-2.30**	?	-0.0056	-5.89***
<i>OCF</i>	-	-0.4145	-12.61***	-	-0.3828	-13.72***	-	-0.0935	-4.39***
<i>Abs_TAC</i>	?	-0.2918	-6.36***	?	0.2182	3.63***	?	0.2555	8.83***
<i>Lev</i>	+	0.0201	2.45***	+	0.0163	1.59*	+	0.0072	1.10
<i>Client_Age</i>	?	0.0003	1.34	?	0.0003	1.09	?	-0.0001	-0.29
<i>Tenure</i>	-	-0.0010	-1.26*	-	-0.0004	-0.47	-	0.0001	-0.21
<i>Prior_AA</i>	-	0.0090	2.13	-	0.0051	1.00	-	-0.0000	-0.01
<i>Pr_Bank</i>	?	-0.0613	-3.96***	?	-0.1017	-5.46***	?	-0.0231	-1.73*
<i>Chg_NI</i>	?	0.0005	1.21	?	0.0000	0.05	?	-0.0005	-1.31
<i>New_Fin</i>	?	0.0056	1.12	?	0.0031	0.59	?	0.0134	3.15**
<i>Loss</i>	?	-0.0115	-1.17*	?	-0.0355	-7.47***	?	-0.0220	-5.30***
<i>Growth</i>	?	-0.0020	-1.40	?	-0.0000	-0.23	?	0.0041	5.16***
<i>Intercept</i>	N/A	0.0756	3.39***	N/A	0.0589	3.59***	N/A	0.1255	3.81***
Joint Tests		Coefficient	F-Stat		Coefficient	F-Stat		Coefficient	F-Stat
Post + Lit*Post	-	-0.0047	1.62*	-	-0.0068	2.15*	-	-0.0048	2.17*
Lit + Lit*Post	-	-0.0016	0.11	-	-0.0095	3.05**	-	0.0012	0.11
N		1,660			524			1,660	
Adj. R-Square		0.5456			-0.3052			-0.1268	

*, **, *** indicate significant at 10, 5, and 1 percent, respectively. Tests are one-tailed when signs are predicted. All variables are defined in Table 1. Industry controls included but not tabulated.

⁹ For the absolute value and positive discretionary accrual analysis, I use a truncated tobit regression which employs a lower (upper) bound of zero for the positive (negative) discretionary accrual values. Utilizing an ordinary least squares (OLS) approach would lead to estimates biased toward zero (Greene 2003).

TABLE 7
Effect of Auditor Litigation on Subsequent Auditor Behavior
Negative Binomial Regression: Audit Report Lag on Clients
Match Based on Total Assets Audited in the Prior Year

$$Arl = \beta_0 + \beta_1 Lit + \beta_2 Post + \beta_3 Lit*Post + \beta_4 BigN + \beta_5 Client_Size + \beta_6 Lag_Arl + \beta_7 Busy + \beta_8 Restate + \beta_9 Qualified + \beta_{10} EI + \beta_{11} ROA + \beta_{12} Prior_AA + \beta_{13} Pr_Bank + \beta_{14} Chg_NI + \beta_{15} New_Fin + \beta_{16} Loss + \beta_{17} Growth + \beta_{18-32} \sum_{i=1}^{15} Industry + \varepsilon \quad (6)$$

<u>Variable</u>	<u>Predicted Sign</u>	<u>Coefficient</u>	<u>Z-Stat</u>
<i>Lit</i>	?	-0.044	-1.11
<i>Post</i>	+	-0.007	-0.29
<i>Lit*Post</i>	+	0.054	1.28*
<i>BigN</i>	?	0.007	0.74
<i>Client_Size</i>	?	-0.020	-3.19***
<i>Lag_Arl</i>	+	0.005	7.56***
<i>Busy</i>	+	0.010	0.45
<i>Restate</i>	+	0.435	2.51***
<i>Qualified</i>	+	0.210	3.40***
<i>EI</i>	+	-0.008	-0.35
<i>ROA</i>	-	0.180	2.17
<i>Prior_AA</i>	?	-0.184	-4.86***
<i>Pr_Bank</i>	?	0.162	2.35**
<i>Chg_NI</i>	?	-0.004	-0.72
<i>New_Fin</i>	?	0.042	1.56
<i>Loss</i>	?	0.071	2.25**
<i>Growth</i>	?	-0.006	-1.24
<i>Intercept</i>	N/A	3.880	55.23
<u>Joint Tests</u>		<u>F-Statistic</u>	
Post + Lit*Post	+	0.0462	3.12**
Lit + Lit*Post	+	0.0010	0.10
N		1,781	
Wald χ^2 Statistic		332.32***	

*, **, *** indicate significant at 10, 5, and 1 percent, respectively.

Tests are one-tailed when hypothesized signs are tabulated.

All variables are defined in Table 1. Industry controls included but not tabulated.

TABLE 8
Effect of Auditor Litigation on Subsequent Auditor Behavior
Negative Binomial Regression: Audit Report Lag on Clients
Match Based on Total Clients Audited in the Prior Year

$$Arl = \beta_0 + \beta_1 Lit + \beta_2 Post + \beta_3 Lit*Post + \beta_4 BigN + \beta_5 Client_Size + \beta_6 Lag_Arl + \beta_7 Busy + \beta_8 Restate + \beta_9 Qualified + \beta_{10} EI + \beta_{11} ROA + \beta_{12} Prior_AA + \beta_{13} Pr_Bank + \beta_{14} Chg_NI + \beta_{15} New_Fin + \beta_{16} Loss + \beta_{17} Growth + \beta_{18-32} \sum_{i=1}^{15} Industry + \varepsilon \quad (6)$$

<u>Variable</u>	<u>Predicted Sign</u>	<u>Coefficient</u>	<u>Z-Stat</u>
<i>Lit</i>	?	-0.027	-0.85
<i>Post</i>	+	0.044	1.44*
<i>Lit*Post</i>	+	0.043	0.99
<i>BigN</i>	?	-0.065	-1.89*
<i>Client_Size</i>	?	-0.007	-0.95
<i>Lag_Arl</i>	+	0.007	9.95***
<i>Busy</i>	+	0.028	1.11
<i>Restate</i>	+	0.266	1.14
<i>Qualified</i>	+	0.293	4.09***
<i>EI</i>	+	-0.038	-0.97
<i>ROA</i>	-	0.083	1.56
<i>Prior_AA</i>	?	-0.084	-2.13**
<i>Pr_Bank</i>	?	0.0599	1.08
<i>Chg_NI</i>	?	0.004	0.93
<i>New_Fin</i>	?	0.046	1.29
<i>Loss</i>	?	0.062	1.93*
<i>Growth</i>	?	-0.003	-0.63
<i>Intercept</i>	N/A	3.71	44.57***
<u>Joint Tests</u>		<u>F-Statistic</u>	
Post + Lit*Post	+	0.088	7.24***
Lit + Lit*Post	+	0.016	0.27
N		1,792	
Wald χ^2 Statistic		306.67***	

*, **, *** indicate significant at 10, 5, and 1 percent, respectively.

Tests are one-tailed when hypothesized signs are tabulated.

All variables are defined in Table 1. Industry controls included but not tabulated.