

Do going concern audit reports protect auditors from litigation?

A simultaneous equations approach

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Abstract

Audit researchers have a longstanding interest in understanding whether issuing a going concern report to financially stressed clients protects the auditor from subsequent litigation. An endogeneity issue arises, in that litigation risk affects the going concern decision and the going concern decision impacts auditor litigation risk. Contrary to the single-stage results, a simultaneous equations approach indicates that issuing a going concern report lessens the likelihood of a class action lawsuit being filed against the auditor. Further, we extend research by providing a more rigorous analysis of the relation between issuing a going concern report and lawsuit outcomes: dismissals and settlement amounts. Our results indicate that issuing a going concern report is not associated with either the likelihood of dismissal or settlement amounts. Overall, by applying simultaneous equations, we provide evidence that auditors are able to deter class action lawsuits by issuing going concern reports to their financially stressed clients.

Keywords: Audit reports; auditor litigation; auditor litigation settlements.

Data availability: The data used in this study are publicly available through sources identified in the study.

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I. Introduction

An important aspect of the auditors' environment is state and federal laws allowing third parties such as investors to sue auditors in an effort to recover damages. Historically, these litigation related costs have been substantial. For example, the legal costs of the Big 6 auditing firms were \$477 million, representing 9% of their domestic auditing revenues in 1991 (Cook et al. 1992). Even with the enactment of the Private Securities Litigation Act of 1995 (PSLRA), which changed auditors' exposure to liability for some federal actions¹, the Center for Audit Quality (2008) reported an increase in auditor litigation costs to 15.1% of their domestic auditing revenues for the six largest auditing firms for 2007, asserting that "auditors face liability exposure dramatically more onerous than any other type of business" (p. 31).

Potentially, auditors may be able to reduce their exposure to litigation when auditing a financially stressed client by issuing a going concern report. In this regard, Carcello and Palmrose (1994, 2) state, "...it is assumed that modified reports prior to bankruptcy protect auditors from litigation. Managers prepare their company's financial statements based on the going concern assumption. In the absence of this assumption (e.g., the company is not a going concern), managers would need to prepare financial statements adopting a liquidation approach. Under current auditing standards, a going concern audit report is required when an auditor has substantial doubt about their client's ability to remain a going concern for a reasonable period of time. The going concern audit report not only emphasizes the company's financial difficulties,

¹ For example, PSLRA amended the Securities Act of 1934 and offered a stay on discovery until the courts reached a decision on a motion to dismiss the lawsuit. PSLRA also imposed a stricter pleading standard and generally eliminated joint and several liability (Coffee 2006).

but also indicates that these difficulties are so serious as to raise substantial doubt about the company's future existence.

Regulators, auditors, financial statement users, and the academic community have for many years debated the usefulness of the going concern report. In 1978, the Commission on Auditors Responsibilities called for the elimination of the going concern report, contending that it was confusing to financial statement users. However, on several occasions the Securities and Exchange Commission (SEC) has opposed attempts to eliminate going concern reporting (Mutchler 1984). If the going concern report provides useful information to investors of companies facing financial stress, then we would expect investors to consider the type of auditor's report (e.g., going concern report) when making a decision about whether to sue the auditor.

Whether a going concern report actually protects auditors against lawsuits is an open question. Empirical results of prior research are mixed. Based on a sample of companies that had filed for bankruptcy, Carcello and Palmrose (1994) find a negative relation between going concern reports and auditor litigation in their univariate tests, but not in their multivariate tests. In contrast, Lys and Watts (1994) examine auditor litigation involving both bankrupt and nonbankrupt clients, finding a positive association between modified audit reports and auditor litigation in their univariate tests, but not in their multivariate tests.

Our study applies a simultaneous equations approach to examine the relation between auditor going concern reporting and investors' decisions to sue auditors. Importantly, this approach takes into account the endogeneity between the auditor's going concern reporting decision and expected litigation risk. We explicitly recognize two separate aspects to the relation between going concern reporting and auditor litigation. First, as clients become more and more distressed, increasing the auditors' litigation risk (Carcello and Palmrose 1994; Krishnan and

Krishnan 1996; Stice 1991), auditors are increasingly more likely to issue going concern reports, suggesting a positive relation between going concern reporting and litigation risk. Issuing a going concern report represents a preemptive action that auditors may take when they judge the risk of investor litigation to be high.

Second, issuing going concern reports to their financially stressed clients is intended to lower the likelihood that investors will sue the auditor. That is, having issued a going concern report may deter investors from suing the auditors, suggesting a negative relation between auditor going concern reporting and auditor litigation. Using a simultaneous equations framework allows us to better understand auditors' decisions about whether to issue a going concern report for their financially stressed clients and investors' subsequent decisions about whether to sue the auditor.

Our study also provides additional evidence on the role of going concern reports on two types of litigation outcomes: dismissals and financial settlements. As discussed below, we develop research questions regarding the relation between issuing a going concern report and litigation outcomes. We contend that whether issuing a going concern report will be related to litigation outcomes depends on whether issuing a going concern report is related to the performance quality of other aspects of the audit. Surprisingly, little evidence exists on the relation between issuing a going concern report and auditor litigation outcomes. While Carcello and Palmrose (1994) provide some evidence on this issue, it is mainly descriptive, due to a small number of settlement observations. Our study includes a larger number of settlement observations, which allows us to perform a more detailed statistical analysis.

We provide evidence on the relation between auditors' going concern reporting decisions and investors' decisions to sue auditors using both a traditional probit and ordinary least squares analysis and a simultaneous equations approach. Our evidence indicates that for auditors'

going concern reporting decisions and investors' decisions to sue auditors, results differ between the two methods. In contrast to the results from probit analysis, our simultaneous equations results reveal a significant positive association between litigation risk and auditor going concern reporting. Perhaps more importantly, using simultaneous equations, our results indicate that going concern reports significantly deter investors from suing auditors. Results from probit analysis indicate that actual going concern reporting is not significantly associated with investors' decisions to sue auditors. Finally, results from our simultaneous equations analysis indicate that going concern reports are not associated with dismissals or settlement amounts.

The remainder of this paper is organized as follows. Section II develops the hypotheses. Section III describes our empirical testing including a discussion of the simultaneous equations methodology. Section IV provides the empirical results, and Section V discusses those results.

II. Hypothesis Development

Auditor Liability

The value of an audit is based, in part, on a "liability" component "that represents the option value of the claim that financial statement users have on their firm's auditors in the event of an 'audit failure'" (Dye 1993, 889).² Third parties such as investors may exercise their claim by suing the auditor. If successful, investors will be able to recover all or part of their losses from the auditor. Investors presumably base their decision on the expected costs and benefits.³ Under the law, investors are most likely to be successful when they have suffered losses and the auditor has performed negligently (Kinney 1993). However, because auditors are known to have

² Wallace (1987) and Menon and Williams (1994) refer to this component as an implicit form of insurance provided by auditors to investors.

³ In addition, investors must find an attorney willing to file the class action lawsuit naming the auditor. Attorneys also consider their expected costs and benefits when making a decision on whether to represent investors in a class action filing.

“deep pockets”, investors who have suffered losses may consider suing the auditor even if there is little evidence of auditor negligence (i.e., the lawsuit may be frivolous). In the early 1990s, auditors pressed Congress for changes in the Securities Exchange Act of 1934, resulting in the passage of the PSLRA.⁴

Investors have the option to sue auditors under state law or federal law.⁵ While laws vary from state to state, claims under state law generally allege auditor negligence, which occurs when the auditor breaches a duty of care that proximately causes damages (Prentice 2009; Talley 2006). Under federal law, investors may sue auditors based on Section 10(b)-5 of the Securities Exchange Act of 1934 or Section 11 of the Securities Act of 1933. Under federal law, individual investors may combine their claims into a class action proceeding, which greatly increases the auditor’s liability exposure. Further, under federal law, investors do not need to demonstrate reliance on either the financial statements or the audit report. Instead, federal courts presume investors relied on both the financial statements and the audit report when equities are traded on a securities market. Claims under Rule 10(b)-5 are based on an intent to defraud or a severe recklessness standard. Claims under Section 11, similar to state laws, are generally based on a negligence standard.

The Center for Audit Quality (2008) identifies three factors that particularly elevate auditors’ liability exposure. First, it is very difficult to demonstrate after the fact that the audit was conducted properly. Often there is not a single right answer for the auditing and accounting issues that auditors confront. Second, auditor litigation decisions are made in hindsight, based

⁴ Research on whether the merits are more or less important after PSLRA is mixed (Choi 2007; Johnson et al. 2007).

⁵ Most auditor litigation is filed in federal court. To illustrate, 94.8% of our sample of 134 auditor lawsuits were filed in federal court.

on subsequent information. For example, when deciding whether to sue the auditor, investors who have suffered subsequent losses will have information about further negative financial outcomes such as insolvency that was not known to the auditor during the engagement. Third, legal concepts such as negligence and intent to defraud are difficult, complex concepts without clear delineations, which are ultimately determined by the courts. As an example, in the Sunbeam case, a claim alleging auditor intent to defraud under Rule 10(b)-5, the court found that the intent to defraud standard was satisfied by the presence of several overlooked “red flags” (re Sunbeam Securities 89 F. Supp. 2d. 1326 [D. S. Fla. 1999]). Further, while legal concepts such as the auditor’s duty of care is informed by professional auditing standards, they are not definitive (Prentice 2009). That is, courts are not bound by professional auditing standards when applying the law and interpreting legal concepts.

Auditor Going Concern Reporting

Professional guidance and auditors’ responsibilities with respect to the going concern assumption have evolved. Statement on Auditing Standards (SAS) No. 34 (AICPA 1981) provided professional guidance about the auditors’ consideration of the going concern assumption before 1988. While not defining a going concern, the standard described examples where the going concern assumption had been violated.⁶ Under SAS No. 34, auditors were required to consider both information contrary to the going concern assumption, such as default on debt, and mitigating factors, such as an impending stock offering that potentially offset the contrary information when forming their audit opinion. Mutchler et al. (1997) found that

⁶ SAS No. 34, paragraph 1 states, “Ordinarily, information that significantly contradicts the going concern assumption relates to the entity’s inability to continue to meet its obligations as they become due without substantial disposition of assets outside the ordinary course of business, restructuring of debt, externally forced revisions of its operations, or similar actions.”

auditors' going concern reporting decisions were significantly associated with contrary information, but not mitigating factors.

SAS No. 59 (AICPA 1988), effective since 1988, increased auditors' responsibilities with respect to the going concern assumption (Ellingsen et al. 1988). SAS No. 59 was issued "in response to concerns raised by members of Congress and the financial press on the auditors' limited role in signaling early warnings about the possibility of business failure" (Asare 1990, 41). For the first time, auditors were required to evaluate the ability of their clients to remain going concerns for a reasonable period of time, not to exceed one year from the date of the financial statements as part of every audit engagement. SAS No. 59 identifies a number of negative financial trends, including recurring operating losses and adverse financial ratios that may be indicative of a going concern problem. If, based on the available evidence, auditors possess substantial doubt, then they need to consider management's plans to improve the company's financial situation (Behn et al. 2001). Further, after considering management plans, if substantial doubt remains about their client's ability to continue as a going concern, then auditors are required to include a going concern paragraph in their reports.

Litigation Risk and Auditor Reporting

In assessing audit risk under SAS No. 47 (AICPA 1983), litigation risks are a component of the auditor's business risk⁷ and implicitly signal that auditors do and should consider litigation risks when setting fees, conducting their work, and issuing reports. Researchers using archival data have generally found that audit fees are positively associated with litigation risk (Beatty

⁷ In describing the auditor's business risk, SAS No. 47 states, "The auditor is exposed to loss or injury to his professional practice from litigation, adverse publicity, or other events arising in connection with financial statements that he has examined and reported on. This exposure is present even though the auditor has performed his examination in accordance with generally accepted auditing standards and has reported appropriately on those financial statements."

1993; Seetharaman et al. 2002; Venkataraman et al. 2008; Willenborg 1999). Bell et al. (2001) examined the relation between auditors' perceived business risk and audit fees using responses to a confidential survey of audit engagement partners for a large international audit firm. The study finds a positive association between perceived business risk and the number of audit hours, but that perceived business risk is not associated with per-hour fees. Bell et al. (2001, 43) conclude that the auditor's behavior (e.g., increases the number of hours when perceived business risk is higher) may reflect a strategy of "purchasing defensibility." While increasing the number of hours may be a reasonable response to higher litigation risk, the auditor may take others' actions when litigation risk is perceived to be high, such as resigning from the audit engagement. Results from both Krishnan and Krishnan (1997) and Shu (2000) show a positive association between litigation risk and auditor resignations.

Auditors are also expected to consider litigation risk in their going concern reporting decisions (Blay 2005; Kida 1980; Krishnan and Krishnan 1996). They may believe that the absence of a going concern report for their financially stressed clients leaves them vulnerable to litigation (Carcello and Palmrose 1994; Geiger and Rama 2006; Mutchler 1984). Auditors are aware that investors may allege a reporting failure when a going concern report was not issued to a severely financially stressed client. Further, resignation and/or additional effort are likely to be poor substitutes when the auditor is at the stage of making a going concern reporting decision. Typically, going concern reports are finalized well after the financial statement date, which could substantially increase the reputational costs to the auditor of resigning so late in the auditing process.⁸ As the going concern report represents an uncertainty about the future, the ability of additional audit effort to resolve uncertainties about the client's future viability may be limited.

⁸ For the period 2000-2007, we identified 269 Big4 auditor resignations on AuditAnalytics for clients with market values over \$1 million. For each auditor resignation, we measured the

Researchers (Kida 1980; Krishnan and Krishnan 1996; Blay 2005) have explored whether engagement-specific litigation risks influence auditors' going concern reporting.⁹ As expected, the results from these studies show that auditors are more likely to issue a going concern report to their clients exhibiting greater engagement-specific litigation risk. Kida (1980) finds that audit partners recognize that not issuing a going concern report to a client that has going concern problems provides "grounds for alleging auditing negligence." Krishnan and Krishnan (1996) report a significant, positive relation between probability of litigation and going concern reporting.

Blay (2005) conducted an experiment to examine auditors' going concern reporting decision. He found that audit managers were more likely to issue a going concern report when facing high litigation risk, but that this relation was explained by their final survival probability assessment. Overall, Blay's findings indicate that auditors consider their clients' engagement-specific litigation risk when making going concern reporting decisions. This suggests that as client litigation risk increases, auditors will be more motivated to issue a going concern report to their financially stressed clients as a preemptive action.

Based upon the above discussion, we propose the following hypothesis:

number of days from the client's fiscal year end (FYE) to the date of the Form 8-K filing. For this sample, the mean auditor resignation was 212 days since the last FYE (about 7 months), the median was 204 days, and under 5% of the auditor resignations were after the end of the FYE. This evidence suggests that auditors are reluctant to resign after the subsequent FYE.

⁹ Related research has explored the relation between the overall legal environment faced by auditors and auditor's going concern reporting decisions (Geiger and Raghunandan 2001, 2002; Geiger et al. 2006). This research shows that auditor's going concern reporting decisions are sensitive to changes in the overall legal environment. Louwers (1998) examined whether litigation risks specific to an audit firm influence going concern reporting decisions. Louwers (1998) constructed a measure of litigation risk specific to an audit firm using alleged audit litigation damages filed against the audit firm in the previous year. Louwers' findings indicate going concern reports were not associated with this measure of litigation risk specific to an audit firm.

H₁: Clients' litigation risk will be positively associated with auditors issuing going concern reports.

Next, we consider the relation between auditors' going concern reporting and their litigation exposure in the form of class action lawsuits naming the auditor. Previously, audit researchers (Carcello and Palmrose 1994; Kida 1980; Mutchler 1984) have contended that an auditor's decision to issue a going concern report to their financially stressed clients will decrease investors' likelihood of suing auditors. Having issued a going concern report to a financially stressed client eliminates the possibility of the auditor being accused of negligence with respect to going concern reporting. We contend that investors who have suffered losses in their financially stressed investments will be predisposed to consider the absence of a going concern report as a reporting failure for two related reasons.

First, investors make their litigation decisions in hindsight. In general, research shows that individuals exhibit hindsight bias, which is the tendency among individuals to overestimate the predictability of an event outcome when the event outcome is known (Fischhoff 1975; Harley 2007; Hawkins and Hastie 1990). That is, "individuals systematically overstate the relative inevitability of an outcome and believe that the 'now realized event' was largely apparent in foresight" (Anderson et al. 1993, 711). Buchman (1985) examined the hindsight bias in the context of predicting firm bankruptcy based on a set of financial statement ratios. As expected, bankruptcy predictions were significantly higher among participants predicting bankruptcy in hindsight (e.g., were informed that the firm subsequently filed for bankruptcy) compared to foresight (e.g., were not informed about the firm's future bankruptcy status). This suggests that investors are likely to believe that negative outcomes such as insolvency are much more predictable after their occurrence, and consequently, the absence of a going concern report may be particularly suggestive of a reporting failure.

Second, individuals, having formed a directional decision preference, engage in motivated or biased reasoning to reach their decision (Kunda 1990). For example, investors who have suffered losses in their financially stressed investments wish to sue the auditor. Thus, reaching a decision to sue the auditor is the preferred conclusion. Under motivated reasoning theory, individuals “search for, interpret, and process information in a biased manner and, consequently, are more likely to reach the preferred conclusion” (Kadous et al. 2003, 759). Support for motivated reasoning theory is widespread (Kunda 1990, 1999), including recent findings using auditors (Kadous et al. 2003) and investors (Hales 2007) as participants.

A vast amount of information may be potentially relevant to assessing a client’s ability to remain a going concern, some contrary and some mitigating. For example, multiple years of negative cash flows would be a contrary piece of evidence, whereas plans to sell certain assets may be considered a mitigating factor. However, under motivated reasoning, individuals who are predisposed to suing auditors are likely to seek out contrary information and to see contrary information as particularly important and predictive of the subsequent negative outcomes that occurred, further increasing the tendency to view the absence of a going concern report as a reporting failure. Further, given their losses, investors may be motivated to file non-meritorious cases against auditors. However, to the extent that investors are solely or primarily motivated to file a non-meritorious case, we would not expect a going concern report to deter these investors from filing a class action lawsuit against auditors.

Research on the relation between going concern reporting and auditor lawsuits is limited and mixed (Blacconiere and DeFond 1997; Carcello and Palmrose 1994; Lys and Watts 1994). Carcello and Palmrose (1994) examine whether going concern reports lessen the likelihood of auditor litigation for Big 6 (8) auditors. They examine the likelihood of auditor litigation for a sample of bankrupt public companies and several different control samples, including a sample

with no auditor litigation. Their univariate analysis indicates that auditor litigation was less likely when the auditor had issued a going concern report. Results from their multivariate analysis indicate that going concern reports were not significantly associated with auditor litigation. Carcello and Palmrose (1994, 17) attribute the differing results to “the interrelationships among the reporting and significant explanatory variables.”

Lys and Watts (1994) also examine auditor litigation and provide evidence on the relation between auditor reporting and auditor litigation. However, they do not restrict their focus to bankrupt companies, and instead compare samples of firms “whose auditors are and are not sued” (p. 65). In their univariate results, they find that auditor litigation is more likely to occur when the auditor had issued a modified report. Similar to Carcello and Palmrose, auditor reporting is not related to auditor litigation for their multivariate analysis. Lys and Watts explain that their differing results for auditor reporting are due to certain events such as financial stress simultaneously influencing both auditor reporting and auditor litigation.

Subsequently, Blacconiere and DeFond (1997) examine whether issuing going concern reports to their publicly traded savings and loan firms (S&Ls) that failed, insulated auditors from litigation. While only based on a sample of 24 cases, the results of Blacconiere and DeFond’s (1997) study indicate that auditors issued going concern reports to S&Ls most likely to fail *ex ante*, but that going concern reporting did not prevent auditor litigation. Similar to Carcello and Palmrose (1994) and Lys and Watts (1994), Blacconiere and DeFond do not take into account the influence of variables such as financial stress that impact both auditor reporting and auditor litigation. Based upon the discussion above, we propose the following hypothesis.

H₂: Going concern reports will lessen the likelihood of class action lawsuits being filed against the auditor.

There are several possible outcomes for class action lawsuits against auditors. The parties may reach an out-of-court settlement, in which case the settlement amount is generally not publicly disclosed. If an out-of-court settlement is not reached, the decisions, including dismissals, of the court become public after they are made. If the courts dismiss a claim because it lacks merit, the auditor's settlement amount will be zero. If the parties have a trial, the settlement amount, if any, will be determined by a judge, jury, or arbitrator. In considering the potential relation between the auditor's going concern report and the outcome of auditor litigation, it is important to recall that under H_2 , investors will be less likely to consider filing a class action lawsuit against the auditor. Note that H_2 does not predict that issuing a going concern report will completely protect the auditor against a class action lawsuit. Thus, we envision that investors will file a class action lawsuit against the auditor in certain situations, even though the auditor had previously issued a going concern report to a financially stressed client.

As discussed above, investors may file non-meritorious cases against auditors. Because frivolous lawsuits represent an effort to seek a cash settlement that is not related to the auditor's negligence, we would expect the going concern report to be unrelated to the suit's dismissal. In such cases, auditors may either reach an out-of-court settlement, or defend their work and reputation in court, and if the suit is frivolous, the courts would be expected to dismiss it.

Further, issuing a going concern report only offers limited protection against litigation from investors. To the extent that auditors were negligent with respect to other aspects of the audit, such as not detecting a material misstatement, a going concern report will not protect auditors from litigation. Thus, even if the auditor issued a going concern report, we expect investors will file non-frivolous lawsuits against auditors if they believe the auditors were negligent in areas other than going concern reporting.

However, it is unclear whether the decision to issue a going concern report to financially stressed clients is associated with the quality of performance on other aspects of the audit engagement. Potentially, auditors may decide not to issue a going concern report to accommodate the client's preferences. Auditors who accommodate the client's preferences on going concern reporting may be expected to accommodate the client's preferences for other aspects of the audit and/or be predisposed to accepting the client's information and explanations. If so, not issuing a going concern report may be associated with negative litigation-related outcomes. Alternatively, the auditor's going concern decision may be unrelated to the quality of the auditor's performance on other aspects of the audit engagement. If so, there should be no relation between issuing a going concern report and litigation outcomes.

Previous research on the relation between going concern reporting and outcomes from auditor lawsuits is limited to Carcello and Palmrose (1994). For a small sample of firms with settlement information, Carcello and Palmrose (1994, 23) observe that "the lowest payments and the highest dismissal rate are associated with reports that are all modified." However, results from their multivariate analysis indicate that the audit report itself is insignificant in the model and that the overall model is also insignificant. Given the ambiguity about the potential relation between going concern reporting and the outcomes from class action lawsuits naming the auditor, we pose the following two research questions.

RQ₁: Will issuing going concern reports increase the likelihood of lawsuit dismissal?

RQ₂: Will issuing going concern reports lessen settlement amounts paid by auditors?

III. Empirical Testing

In this section, we discuss sample selection, initial models of auditor reporting, auditor lawsuit risk, and auditor settlement risk using probit analysis, and modifications to these models in order to use a simultaneous equations approach.

Sample Selection

Our first sample consists of financially stressed firms involving securities class action litigation during the period 1986-2008. Following Louwers (1998) and Hopwood et al. (1994), we considered net loss and negative retained earnings as indicators of financial stress. Specifically, we considered a firm to be financially stressed if it had two consecutive years of net losses and negative retained earnings. We initially identified over 29,100 financially stressed firm years during the test period. We excluded any firm that was not on CRSP or small firms that had a market value of under \$1m or were thinly traded.¹⁰

Our focus on financially stressed clients is in contrast to previous research (Blacconiere and DeFond 1997; Carcello and Palmrose 1994; Lys and Watts 1994). Realistically, auditors only consider issuing going concern audit reports to their financially stressed clients (Carcello and Neal 2000; Mutchler 1985; Mutchler et al. 1997). Consequently, we believe that financially stressed companies represent an important and appropriate group in which to examine the relation between going concern audit reporting and investor litigation against auditors.¹¹

We determined whether or not a securities class action lawsuit had been filed against auditors by examining the databases constructed by Palmrose (1999), the Stanford Class Action

¹⁰ Thinly traded firms were defined as those with less than 100 business days of trading activity during the fiscal year in question.

¹¹ Further, questions could be raised about the appropriateness of focusing only on bankrupt firms. For example, bankrupt firms may not exhibit signs of financial stress prior to bankruptcy (Argenti 1976; McKeown et al. 1991; Mutchler 1985) or may enter bankruptcy for strategic, rather than financial reasons (Bell 1994).

Securities Clearinghouse, AuditAnalytics, Lexis/Nexis, Westlaw, Casemaker, and the popular press. We excluded auditor-related litigation dealing with private companies, not-for-profit entities, mutual funds, initial public offerings (IPOs), American Depository Receipts (ADRs), backdated stock options, and insider trading litigation. We also excluded clients audited by non-BigN audit firms. Table 1, Panel A reports our sample selection criteria.

(Insert Table 1 about here)

Based on our selection criteria, 134 firms comprise our final auditor litigation sample. Our auditor litigation sample size is comparable to the COMPUSTAT auditor litigation sample used by Lys and Watts (1994), which was not restricted to financially stressed firms and larger than the auditor litigation samples of Blacconiere and DeFond (1997), Carcello and Palmrose (1994), Heninger (2001), and Stice (1991).

Figure 1 provides a timeline representing the time period before and after investor litigation against auditors. For firms included in the auditor litigation sample, the last audited fiscal year end (FYE) prior to the filing of the class action lawsuit against the auditor is the event date.¹² Based on this event date, the clients' FYE ranged from 1985 to 2007. Table 1, Panel B provides the sample frequency by time periods.¹³

(Insert Figure 1 about here)

¹² For example, a securities class action lawsuit was filed against Vitesse Semiconductor Corp. on May 1, 2006 for class period January 28, 2003 through April 26, 2006. The lawsuit claimed Vitesse issued false and misleading financial statements based upon improper accounting practices and attached Vitesse's auditor, KPMG, to the lawsuit. For purposes of this study, we measure a client's financial position at the last audited fiscal year end prior to the lawsuit; for Vitesse that would be their financial statements for the fiscal year ending September 30, 2005 filed on December 13, 2005. KPMG settled the class action lawsuit by paying \$7.75 million on June 16, 2008.

¹³ SAS 59 was effective for audits of financial statement for periods beginning on or after January 1, 1989, the Private Securities Litigation Reform Act (PSLRA) became effective as of December 22, 1995, and the Sarbanes-Oxley act (SOX) became effective as of July 31, 2002.

Higher levels of auditor litigation have been associated with certain industries (Francis et al. 1994). Table 1, Panel C, presents industry frequencies based upon two-digit SIC codes. The two highest industry concentrations, business services and computer & office equipment, represented 31.3% of the auditor litigation sample, and only three industries represented more than 5% of the auditor litigation sample.¹⁴

When available, we reviewed the legal complaints citing the auditor as a defendant. Table 1, Panel D provides a frequency count of when the auditor's report was mentioned in the class action complaint against the auditor. The auditor's report was mentioned in 58.2% of the cases with the going concern report or substantial doubt noted in 36.9% of all complaints.¹⁵ Such frequency counts provide evidence that the auditor's reporting decision is a consideration in investors' decisions to sue auditors, especially for financially distressed firms. The appendix provides several samples from actual auditor litigation complaints against the auditor which cite the auditor's report.

Similar to prior research (Heninger 2001; Lys and Watts 1994; Stice 1991),¹⁶ a matched-pairs experimental design was used to test our hypotheses and research questions. Each firm in

¹⁴ The first two industries were also cited by Francis et al. (1994) as industries with a high incidence of litigation.

¹⁵ We compared the financial condition of firms where the complaint indicated that the auditor failed to disclose substantial doubt or going concern report (n=49) to firms where the complaint did not raise this issue and the auditor had not issued a going concern report (n=45). Using both means and medians, the financial condition, using a *ZScore* computed from Zmijewski (1984) model, was significantly weaker among firms in the former group compared to the latter group (t=2.14, p < .035, for means and chi square = 4.56, p < .032 for medians). This suggests that investors did not arbitrarily allege auditor going concern reporting deficiencies. Instead, such decisions appear to be based, in part, on the client's financial condition.

¹⁶ Carcello and Palmrose (1994) do not use matching. Instead, their total sample was comprised of public companies that declared bankruptcy and divided into subsamples involving auditor litigation, non-auditor litigation, and no litigation.

our auditor litigation sample was matched with a control firm. A control firm was selected based upon financial stress, year, industry (two-digit SIC code), and assets, respectively.¹⁷ Matching on industry and year is consistent with previous research (Heninger 2001; Lys and Watts 1994; Stice 1991). Including financial stress in the matching process is more restrictive than the matching criteria used in previous matched sample auditing litigation research.¹⁸ Including financial stress as a matching criterion ensured that control as well as auditor litigation firms faced substantial financial stress, and consequently, auditors needed to consider issuing a going concern report to all sample companies. We refer to the 134 firms selected using this matching process as the control sample.

Table 2 provides descriptive statistics for firms in the auditor litigation and control samples. Financial, audit, and market data were obtained from Compustat, Compact Disclosure, AuditAnalytics, CRSP, and public filings. Return on assets, market value, abnormal accruals, stock return, sales growth, reporting lag, cash flow from operations, debt covenant defaults, and the CEO also being the chairman of the board were not significantly different for the auditor litigation and control samples based upon either mean or median testing. Also shown in Table 2, the financial condition of the auditor litigation and control samples were not significantly different.¹⁹ This is not surprising, given the financial distress selection criteria.

¹⁷ We were unable to match based upon two-digit SIC codes in 4 out of the 134 cases. For these 4 cases, we used one-digit SICs. We tested the sensitivity of our results by deleting these 4 firms and also by matching based upon two-digit SIC code using the previous year. Our results were unchanged with using these alternative matching procedures.

¹⁸ Financial stress for the control sample was operationalized in the same way as the auditor litigation sample. Specifically, to be included as a match in the control sample, a firm exhibited two consecutive years of net losses and negative retained earnings.

¹⁹ Financial condition was measured using the Zmijewski (1984) model constructed from the variables return on assets, debt/assets, and the current ratio.

(Insert Table 2 about here)

No significant differences are noted between the lawsuit and control samples for going concern reports. This insignificant univariate result differs from both Carcello and Palmrose (1994) and Lys and Watts (1994). Recall, Carcello and Palmrose (1994) find a significant negative relation between going concern opinions and auditor litigation whereas Lys and Watts (1994) report a significant positive relation between going concern opinions and auditor litigation. Our contrary findings of insignificant results may be attributable to matching based, in part, on financial stress and differing test periods.

For each of the 134 auditor lawsuits identified, we sought to determine whether a final auditor settlement had been reached. We were able to determine the final auditor settlement for 103 lawsuits by reviewing Palmrose (1999), the Stanford Class Action Securities Clearinghouse, Lexis/Nexis, Westlaw, Casemaker, and the popular press. For this subset of 103 lawsuits, 52 (50.5%) resulted in the auditor being dismissed from the litigation. Descriptive statistics for both the dismissed and settled auditor lawsuits are presented in Table 3. Mean and median tests of differences between the two outcome groups show lawsuits against auditors were more often dismissed when a going concern report had been issued. The difference is striking, in that 50.0% of the dismissed cases had a going concern report compared to only 25.5% of the settled cases. These univariate results provide initial support that the going concern report is associated with lawsuit dismissal.

(Insert Table 3 about here)

For the 51 cases with settlement information, the mean payout was \$14.7 million (median of \$4.8 million). The distribution of auditor payout settlements was skewed.^{20 21} Also, as shown

²⁰ To illustrate, Deloitte paid \$210 million in 2006 for the Adelphia audit and Ernst & Young paid \$185 million in 1999 for the Merry-Go-Round audit.

in Table 3, lawsuits against auditors were more often settled when the litigation complaint mentioned the deficiencies in the auditor's report and the law firm of Milberg Weiss was one of the plaintiff's attorneys.

Auditor Reporting, Auditor Lawsuit Risk, and Auditor Settlement

In this section, we develop models of auditor reporting, litigation risk, and auditor litigation settlements. These models were initially tested using the conventional probit and ordinary least squares analysis. In the next section, we discuss the changes to these models in order to apply a simultaneous equations approach. Model 1, used to test Hypothesis 1, estimates the auditor's going concern reporting decision as follows:

$$GCAR = \alpha + \beta_1 Lawsuit_{[instrument]} + \beta_2 LMValue + \beta_3 CFOps + \beta_4 AbAccruals + \beta_5 Tenure + \beta_6 Return + \beta_7 ZScore + \beta_8 Growth + \beta_9 Bankrupt + \beta_{10} CEOCOB + \beta_{11} Insider + \beta_{12} Institutional + \beta_{13} Default + \beta_{14} ReportLag + \varepsilon \quad [1]$$

The dependent variable (*GCAR*) is a dichotomous variable identifying those firms that received a going concern auditor's report (=1), otherwise = 0. Our variable of interest, *Lawsuit*, is an ex post measure of whether the auditor was named in a class action lawsuit (=1) or not (= 0). A significant positive coefficient is expected for *Lawsuit*.

The remaining control variables were derived from the prior auditing literature on going concern audit opinions.²² *LMValue* is the log of the client's market value of equity as proxy for firm size. Cash flow from operations, *CFOps*, scaled by assets was included as a performance measure (Mutchler 1984). The estimate of abnormal accruals, *AbAccruals*, was based on the

²¹ We excluded any auditor litigation settlement values that resulted from the consolidation of multiple lawsuits such as the \$400 million paid by Ernst & Young, the \$312 million paid by Deloitte, and the \$186 million paid by KPMG to the federal government to settle litigation arising out of the Savings & Loan industry in the early 1990s.

²² For a sample of the audit research on the determinants of going concern audit reports, see Raghunandan and Rama (1995), Mutchler et al. (1997), and DeFond et al. (2002).

modified Jones model, divided by lagged total assets (Dechow et al. 1995) and intended as a measure of earnings quality. *Tenure* was coded as 1 for instances where the auditor-client relationship was 4 or more years, and = 0 for auditor-client relationships less than 4 years (Carcello and Nagy 2004). Following DeFond et al. (2002), we included the firm's stock returns over the fiscal year (*Return*).

ZScore is a measure of financial distress, computed using the Zmijewski (1984) composite measure of distress, while *Growth* is the percentage change in sales from the prior year to the FYE. *Bankrupt* is a dummy variable (= 1) to indicate whether the client filed for bankruptcy in the following fiscal year after the issuance of the auditor's report, or not (= 0). We included three corporate governance measures given the linkage between governance and audit reporting decisions (Carcello and Neal 2003): *CEOCOB* = 1 if the chief executive officer was also the chairman of the board, *Insider* = the percentage of insider ownership, and *Institutional* = the percentage of institutional ownership. *Default* = 1 indicating whether the client violated a debt covenant during the fiscal year covered by the auditor's report, or not (= 0). *ReportLag* = the number of days between the fiscal year end and the earnings announcement (DeFond et al. 2002). We expected positive coefficients for *AbAccruals*, *ZScore*, *Bankrupt*, *Default*, and *ReportLag* and negative coefficients for *LMValue*, *CFOps*, *Tenure*, *Return*, *Growth*, *CEOCOB*, *Insider*, and *Institutional*.

Model 2 estimates auditor's litigation risk to test Hypotheses 2.

$$\begin{aligned}
 LAWSUIT = \alpha + \beta_1 G\text{CAR}_{[instrument]} + \beta_2 LM\text{Value} + \beta_3 C\text{FOps} + \beta_4 Ab\text{Accruals} + \\
 \beta_5 Tenure + \beta_6 Return + \beta_7 Z\text{Score} + \beta_8 Growth + \beta_9 Bankrupt + \beta_{10} CEOCOB + \\
 \beta_{11} Insider + \beta_{12} Institutional + \beta_{13} VarReturns + \beta_{14} Turnover + \varepsilon \quad [2]
 \end{aligned}$$

The dependent variable, *LAWSUIT*, was previously defined and measures auditor litigation. Our variable of interest, *GCAR*, is an ex post measure of whether the auditor issued a going concern report for the event date financial statements. The control variables were selected based upon

prior literature on auditor litigation as reported in Stice (1991) and Heninger (2001). The first 11 control variables included in Model 2 were previously defined in our discussion of Model 1. *VarReturn* is the variance of the abnormal size-adjusted returns for the 12 months during the event date (Stice 1991). *Turnover* is the proportion shares traded at least once during the fiscal year (Field et al. 2005).²³ Both *VarReturn* and *Turnover* are expected to have positive coefficients and *LMValue* is now expected to have a positive coefficient.

Model 3 estimates auditor litigation outcomes. Two versions of the model were constructed to provide evidence for research questions 1 and 2.

$$DISMISSED \text{ or } LSETTLEMENTS = \alpha + \beta_1 GCAR_{[instrument1]} + \beta_2 LMValue + \beta_3 CFOps + \beta_4 AbAccruals + \beta_5 Tenure + \beta_6 Return + \beta_7 ZScore + \beta_8 Growth + \beta_9 Bankrupt + \beta_{10} CEOCOB + \beta_{11} Insider + \beta_{12} Institutional + \beta_{13} LackedDoubt + \beta_{14} MilbergWeiss + \varepsilon \quad [3a \text{ and } 3b]$$

In Model 3a, the dependent variable is *DISMISSED*, which is a binary variable coded as 1 if the auditor litigation was dismissed, and = 0 otherwise (i.e., the auditor paid a cash settlement to resolve the lawsuit). Research Question 1 addresses whether going concern reports increased the likelihood of dismissal. In Model 3b, the dependent variable is *LSETTLEMENTS*, calculated as the log of the actual amount of the legal settlement paid by the auditor (in millions) + 1. As discussed above, the skewed distribution created by a few very large auditor settlements warranted using a log transformation. Research Question 2 addresses whether the going concern report is negatively associated with *LSETTLEMENTS*. *GCAR* and the first 11 control variables were previously defined and discussed above with respect to the lawsuit model, Model 2. Models 3a and 3b also include two additional variables, *LackedDoubt* = 1 if the litigation complaint mentioned that the auditor failed to disclose substantial doubt or a going concern

²³ *Turnover* was computed as $(1 - \Pi(1 - \text{daily turnover rate}))$, with the daily turnover rate being the daily volume of shares traded, divided by the total number of shares outstanding for the day.

report (as reported in Table 1, Panel D), = 0 otherwise²⁴, and *MilbergWeiss* = 1 if the law firm Milberg Weiss was attached to the litigation, otherwise = 0.²⁵ A negative coefficient is expected for *LackedDoubt* for Research Question #1 and a positive coefficient for Research Question 2. Given MilbergWeiss' reputation for aggressively litigating against audit firms, a negative coefficient is expected for the *Dismissed* analysis and a positive coefficient is expected for the *Settlement* analysis.

A Simultaneous Equations Analysis

When a client exhibits clear signs of financial stress, the auditor must make a decision on whether to issue a going concern audit report to the client. A client facing financial stress increases the auditor's litigation risk. As a preemptive action when auditing financially stressed clients, auditors may issue a going concern report.²⁶ Subsequently, equity holders suffering losses may be deterred from suing an auditor who had previously issued a going concern report. Thus, there is interdependency between auditors' going concern reporting decisions and their litigation risks. Stated differently, the occurrence of investors suing auditors is not exogenous, and depends in part on the auditor's going concern reporting decision. Thus, it may not be suitable to simply include a binary variable for either the auditor's going concern report or

²⁴ Additionally, we also included a material misstatement variable in the analysis of dismissals and litigation settlements. This variable equaled 1 if the litigation complaint mentioned that the auditor failed to mention a material misstatement (as reported in Table 1, Panel D), and equaled 0 otherwise. In untabulated results, material misstatement was not significant and its inclusion did not change any of the reported results for both auditor dismissal and litigation settlements.

²⁵ Milberg Weiss has been involved in over 50 percent of all securities class action lawsuits between 1996 and 2002 (Simmons and Ryan 2003) and was known to be able to extract large settlements from companies in over 80% of the firm's lawsuits (Lenzner and Lambert 2004).

²⁶ Field et al. (2005) also used a simultaneous equations methodology to examine the role of voluntary disclosures on securities litigation.

investors' litigation decision as an independent variable in a probit model, given the potential correlation between the error terms in Model 1 and Model 2. Similarly, interdependency may exist between auditors' going concern reports and outcomes from investor litigation against auditors, models 3a and 3b. Consequently, a simultaneous equations approach is more appropriate to examine auditor going concern reporting decisions and auditor litigation outcomes (i.e., being sued, dismissals, and settlement amounts).

Our first multivariate analysis using the simultaneous equations approach addresses whether litigation risk affects going concern audit reports. Stage 1 regresses Model 2, excluding *GCAR*, to determine a predicted value of *LAWSUIT*. We refer to this reduced form as Model 2a.²⁷ The predicted values determined from the first stage is an instrumental variable, referred to as *LAWSUIT_[instrument]*, and is included in Model 1, which is the second stage equation.

LAWSUIT_[instrument] is the variable of interest to test Hypothesis 1.

Our second multivariate analysis examines whether the going concern reporting decision deters auditor lawsuits. The first stage represents the probability of the auditor issuing a going concern report from Model 1, excluding *LAWSUIT*. The predicted value determined from the first stage is an instrumental variable, referred to as *GCAR_[instrument]*. We refer to this reduced form as Model 1a. *GCAR_[instrument]* is an appropriate proxy because it is ex ante estimate of auditor going concern reporting probability. The second stage equation for *LAWSUIT* is identical to Model 2, except that *GCAR_[instrument]* substitutes for *GCAR*. *GCAR_[instrument]* is the variable of interest to test Hypothesis 2.

²⁷ Milberg Weiss has been involved in over 50 percent of all securities class action lawsuits between 1996 and 2002 (Simmons and Ryan 2003) and was known to be able to extract large settlements from companies in over 80% of the firm's lawsuits (Lenzner and Lambert 2004).

An important feature in conducting a simultaneous equations analysis is to find a unique set of instrument variables (IV) that are correlated with the going concern decision as measured in Model 1, but uncorrelated with the auditor litigation decision as measured in Model 2. Similar relationships must exist in the second analysis that unique IV for the auditor litigation decision of Model 2 but are not relevant to the going concern decision of Model 1. In this regard, *Default* and *ReportLag* are unique to the GCAR reporting decision, whereas *VarReturns* and *Turnover* are unique only to the litigation model. Such a condition is generally unimportant for testing in a probit model, but is essential for models used with a simultaneous-equations approach (Larker and Rusticus 2010).

Our third multivariate analysis examines whether the going concern reporting decision influences litigation outcomes. Again, the first stage represents the probability of the auditor issuing a going concern report from Model 1, excluding *LAWSUIT* with the predicted values determined from the first stage as an instrumental variable, referred to as $GCAR_{[instrument]}$. The second stage equations for *DISMISSED* or *LSETTLEMENTS* are identical to Model 3, except that $GCAR_{[instrument]}$ substitutes for *GCAR*. $GCAR_{[instrument]}$ is the variable of interest to provide evidence for research questions 1 and 2.

IV. Results

Below, we report the empirical results for auditor reporting, class action litigation against auditors, auditor settlements, and various robustness checks.

Does Auditor Litigation Risk Affect the Auditor's Going Concern Decision?

The results of the single-stage probit analysis for Model 1 are presented in column 1 of Table 4. As shown, several of the control variables are significant and all in the expected direction. The overall model's explanatory power (pseudo $R^2 = 0.306$) is comparable with the

prior going concern literature.²⁸ As shown in column 1 of Table 4, *Lawsuits*, the variable of interest to test Hypothesis 1, is not significant, providing corroborating evidence that auditors do not incorporate litigation risk when issuing going concern audit reports. Recall, the univariate test in Table 2 also found an insignificant relationship between auditor litigation and auditor going concern reporting. However, *Lawsuit* may be an inappropriate proxy for auditor litigation risks because of the interdependency between the auditor's going concern reporting decisions and their litigation risks.

(Insert Table 4 about here)

As mentioned, the single-stage probit analysis does not control for the endogeneity issue. That is, auditors' tendency to issue going concern reports and their litigation risks are likely to be associated with one or more common elements, such as financial distress. The single-stage probit analysis attempts to control for financial distress on the auditor's reporting decision through the matching procedures and by including *ZScore* as an independent variable, whereas a simultaneity bias may be induced by endogeneity, which could explain why *Lawsuit* is insignificant. We performed a Hausman specification test (Hausman 1978) and determined that there is significant endogeneity between *GCAR* and *LAWSUIT* ($\chi^2 = 26.34$; $p < 0.05$). Results of the Hausman specification test confirm the presence of simultaneity bias, and consequently, results of the single-stage probit analysis may lead to biased and inconsistent estimators.

Columns 2 and 3 of Table 4 present the results of the two-stage least squares (2SLS) simultaneous equations analysis. In column 2, with respect to the first stage model, it is important to note that both of the independent variables that were unique to the *LAWSUIT* model, *VarReturns* and *Turnover*, are significant and in the expected direction. This shows that auditor

²⁸ The results are similar to those reported by Mutchler et al. (1997).

litigation is more likely for clients exhibiting higher return variance and stock turnover during the event fiscal year. The results from the second stage model show a significant positive coefficient for the *LAWSUIT*_[instrument] variable. This indicates that after controlling for endogeneity, auditors consider litigation risk when deciding whether to issue the going concern report. The results from the simultaneous equations analysis offer support for Hypothesis 1.

A bivariate probit analysis is presented in column 4 of Table 4. The bivariate probit does not impose any stringent structure in terms of variables to be included in each of the equations as compared to the two-stage least squares analysis.²⁹ The second stage of the bivariate probit analysis reports also show a significant positive coefficient for the *LAWSUIT*_[instrument] variable, providing further evidence in support of Hypothesis 1.

Does a Going Concern Report Deter Investors from Suing Auditors?

The results of the single-stage probit analysis for Model 2 are presented in column 1 of Table 5. As shown, several of the control variables are significant and all are in the expected direction. The variable of interest to test Hypothesis 2, *GCAR*, is not significantly associated with auditor litigation, leading to the initial conclusion that the *GCAR* is not a deterrent to class-action lawsuits being filed against auditors. However, because the single-stage probit analysis does not control for the endogeneity issue, we again performed the Hausman specification test (Hausman 1978). The results of this test indicated that there is significant endogeneity between *GCAR* and *LAWSUIT* ($\chi^2 = 32.82$; $p < 0.01$), and consequently, the results of the single-stage probit analysis may be biased and the estimators inconsistent.

²⁹ The bivariate probit model is a maximum likelihood two-stage probit model which controls for endogeneity given two binary dependent variables. The approach permits the covariance of the error terms from each equation to be nonzero, and addresses endogeneity in a similar manner as the standard Heckman (inverse Mills ratio) approach (Schroeder 2010). The bivariate probit approach has been used in the auditing literature relating to binary auditor choice decisions (Willenborg 1999; Muller and Riedl 2002).

(Insert Table 5 about here)

The results for the 2SLS simultaneous equations analysis are presented in columns 2 and 3 of Table 5. In column 2, with respect to the first stage model, it is important to note that both of the independent variables unique to the *GCAR* model, *Default* and *ReportLag*, are significant and in the expected direction. This shows that auditors are more likely to issue a going concern report to their clients in default and are associated with longer reporting delays relating to their earnings announcements. In contrast to the single-stage probit analysis, in stage 2, as shown in column 3, the $GCAR_{[instrument]}$ variable is significant and negative. This indicates that controlling for endogeneity, the likelihood of auditor litigation is lower when the auditor has issued a going concern audit report. Consistent results, supporting Hypothesis 2, are also reported for the bivariate probit analysis presented in column 4. These results from the simultaneous equation analysis and bivariate probit analysis support the argument that going concern reports deter investors from naming auditors in class action litigation.

Auditor Litigation Outcome Analysis

Table 6 column 1 reports the results of a single-stage probit analysis for Model 3a based upon the subset of 103 firms where auditor settlement data was available. Recall, the dependent variable, *DISMISSED*, = 1 if the auditor litigation was dismissed, and = 0 otherwise. As shown, the only significant control variables are *LackedDoubt* and *MilbergWeiss*. The variable of interest in column 1 of Table 6, *GCAR*, is not significant related to auditor dismissal, leading to the initial conclusion that auditor lawsuit dismissals are not associated with going concern reporting.

(Insert Table 6 about here)

The results for the simultaneous equations analysis are presented in columns 2 and 3 of Table 6 for all settlement firms (n = 103).³⁰ As shown, *LackedDoubt* and *MilbergWeiss* remain significant in the simultaneous equations analysis. The results for *LackedDoubt* indicate that dismissal was significantly less likely when the complaint referenced a deficiency with respect to the auditor's going concern reporting responsibilities. Consistent with the single-stage probit analysis, the $GCAR_{[instrument]}$ variable is not significant. This indicates that after controlling for endogeneity, auditor dismissals are not associated with going concern reporting. Similar insignificant results were noted with the bivariate probit analysis reported in column 4. Overall, in response to Research Question 1, consistent results in all analyses indicate that issuing a going concern report does not benefit auditors with respect to auditor dismissal.

These insignificant results for $GCAR$ and $GCAR_{[instrument]}$ prompted further investigation into those litigation cases, where the client received a $GCAR$ report but the auditor was not dismissed from the case. We noted that such firms were smaller in size and 69.2% (9 out of 13) were prior to passage of the PSLRA.³¹ We performed additional analyses using only the 51 firms where auditor settlement data were available. Table 7 column 1 reports the results of an OLS analysis for Model 3b. Recall, the dependent variable, $LSETTLEMENTS$ = the log of the amount of the auditor's legal settlement in millions, +1. The size measure, $LMValue$, was the only significant control variable in the settlement model. The variable of interest in column 1 of

³⁰ We conducted a Hausman specification test for endogeneity between $GCAR$ and $DISMISSED$ and $GCAR$ and $LSETTLEMENTS$ and we were unable to reject the null hypothesis. A simultaneous equations approach still appears appropriate, given the prior noted endogenous relationship between $GCAR$ and $LAWSUITS$.

³¹ We included an interaction term ($GCAR*PSLRA$) in our single stage probit analysis (Model 3a) and noted that it was positive and significant (t= 1.97). This result indicates that going concern reports may have increased the probability of auditor dismissal after passage of the PSLRA.

Table 7, *GCAR*, was not significant, leading to the initial conclusion that auditor settlements are not impacted by the auditor's going concern reporting.

(Insert Table 7 about here)

The results for the simultaneous equations analysis of settlement amounts are presented in columns 2 and 3 of Table 7. In column 2, with respect to the first-stage model, it is important to note that one of the independent variables unique to the *GCAR* model, *Default*, is significant. This shows that auditors are more likely to issue a going concern report to their clients in default. As shown in column 3, and consistent with the OLS analysis, the $GCAR_{[instrument]}$ variable is not significant. This indicates that after controlling for endogeneity, auditor settlements are not affected by issuing a going concern audit report. Overall, in response to research question 2, the results from both the OLS analysis and the simultaneous equation analysis indicate that issuing a going concern report does not benefit auditors with respect to their settlements.

Robustness Checks

Our analysis spans 23 years during which several prominent changes occurred dealing with auditors' regulatory and legislative environments. First, we identified three subsamples: post-SAS 59, pre-PSLRA, post-PSLRA. Second, we identified the subsample of non-financial firms. The results based upon these subsamples are presented in Table 8. For all four subsamples, the variables of interest, $Lawsuit_{[instrument]}$ and $GCAR_{[instrument]}$, are significant and in the expected direction. These partitioned results lead to the conclusion that our overall results are not sensitive to differing time periods and the main exogenous events relating to audit reports and auditor litigation.

We included several different variables in our model as potential explanatory variables for both the going concern and auditor litigation models (Model 1 and Model 2). *EXCHANGE* = 1 if the firm traded on the *NASDAQ* exchange, and = 0 otherwise; *SAS34* = 1 if the audit report

was issued before 12/31/88, and = 0 otherwise; and *ROA* = earnings before interest, taxes, and depreciation, scaled by assets. We also included *HighLitigation* = 1 if the audit client operated in a high litigation industry as identified by Francis et al. (1994), otherwise = 0; and *AAER* = 1 if the audit client received an SEC AAER following the event year. The auditor's market share (*MShare*) based upon two-digit SIC codes was also introduced into the model. To measure risk, we included *MVBV* being market value scaled by book value.

Similar to Shu (2000), we included *Accounts Receivable/Assets*, *Inventory/Assets*, *Beta*, and *Technology* (SIC codes in the 2830s, 3570s, 7370s, and 3825-3839) as control variables. Similar to Lys and Watts (1994), we also included *Acquisition* (=1 if acquired after FYE) and *Independence* (audit firm's proportion of revenues from client) as control variables. In the litigation outcome analysis (Models 3a and 3b), we included a continuous variable to measure the probability of a lawsuit (*PLAWSUIT*) based upon the coefficients from Model 2. The inclusion of these additional control variables did not change the overall reported results.

We also conducted some alternative measurements for the variables used in both models. We replaced *LMValue* with the log of client assets to measure size. We scaled *SETTLEMENTS* by the square root instead of the log. We also computed financial distress using the Altman (1968) metric. Finally, we replaced the signed abnormal accruals (*abs(AbAccruals)*) with unsigned ones. Again, the overall results did not change.

Our design consisted of an equal number of observations in the auditor litigation and non-litigation (i.e., control) samples. Auditor litigation is a relatively uncommon event, leading to a potential problem of disproportionate sampling, which occurs when a sample is matched on the dependent variable. Following Cram et al. (2009), we conducted our testing of Models 1 through 3 using conditional logit analyses. The basic results were unchanged.

V. Discussion

The purpose of this study is to provide new evidence on the relation between auditors' going concern reporting decisions and investors' class action lawsuits against auditors. Relative to previous research, our research makes two important innovations. First, we introduce a simultaneous equations approach to examine the relation between auditor's going concern reporting and litigation risk. Both auditor's going concern reporting and their expected litigation risks may be related to one or more common variables such as the client's financial stress. Ignoring these interdependencies could lead to biased coefficient estimates when using traditional statistical approaches such as probit. By using simultaneous equations, we are able to control for any endogeneity between going concern reporting and auditor's expected litigation risk.

Secondly, relative to prior research (Blacconiere and DeFond 1997; Carcello and Palmrose 1994; Lys and Watts 1994), we provide a more comprehensive examination of the relation between going concern reporting decisions and a broader range of litigation outcomes, including both investors' decision to sue auditors and the outcomes of the litigation. It is important to understand whether the potential benefits of going concern reports extend beyond deterring investor lawsuits, which has been the primary focus of previous research. We extend research by providing evidence on whether going concern reports are associated with dismissals and settlement amounts.

Our results using a simultaneous equations approach indicate that for financially stressed clients, auditors' going concern reporting decisions are associated with the expected litigation risk. Our simultaneous equation results provide evidence that auditors make going concern reporting decisions strategically, considering the litigation risk of their financially stressed clients. Specifically, our simultaneous equation results suggest that auditors use going concern

reporting as a preemptive action in response to elevated levels of litigation risk, which is consistent with professional auditing standards (e.g., SAS No. 47).

Perhaps, more importantly, our results using a simultaneous equations approach indicates that issuing a going concern report is associated with a lower likelihood of being named in a class action lawsuit. Our simultaneous equation results provide evidence that investors consider the auditor's report when making litigation decisions for their financially stressed investments. Further, the results from the bivariate probit analysis provided corroborating evidence, also indicating that auditors are less likely to be named in a class action lawsuit when a going concern report had been issued.

Our evidence showing that going concern reports deter investors from filing class action lawsuits against auditors is important, in that it suggests that going concern reports are useful to investors. Thus, when investors see a going concern report for financially stressed companies, they are apparently less likely to blame the auditor for their investment losses. In contrast, results from the single-stage probit analysis indicated that issuing a going concern report was not significantly associated with *LAWSUIT*, and consequently, did not deter investors from naming the auditor in a class action lawsuit. These differing results highlight the need to consider endogeneity issues when making inferences about whether the going concern report is useful to investors and/or limits auditors' expected litigation-related costs for their financially stressed clients.

Our results also indicate that issuing a going concern report is not associated with either lawsuit dismissal or settlement amounts. We believe there are two implications of these results. First, the results suggest that decisions to issue a going concern report are not associated with negligence with respect to other aspects of the audit. Second, they suggest that potential litigants are aware that a going concern report provides auditors with only limited litigation protection.

That is, issuing a going concern report offers the auditor protection against claims of negligence due to reporting, but not other claims of auditor negligence. For example, a going concern report is unlikely to deter investors from naming the auditor in a lawsuit in situations involving allegations of auditor negligence for fraudulent financial statements.

Across all three litigation outcome measures (e.g., *LAWSUIT*, *DISMISSED*, *LSETTLEMENTS*), our results indicate that potential litigants make their litigation decisions strategically. Our results suggest that when there are apparently no or few other signals of auditor negligence, having issued a going concern report deters potential litigants from filing class action lawsuits naming the auditor. However, when there are apparently other signals of auditor negligence and litigants go forward with a class action lawsuit naming the auditor, our results suggest that having issued a going concern report does not offer protection in terms of the likelihood of dismissal or the expected settlement amount.

Our results should be of interest to auditing practitioners. Generally, managers of public companies prefer that the audit report does not contain a going concern paragraph (Geiger and Rama 2006; Mutchler 1984). In this regard, researchers have found that issuing a going concern audit report increases the likelihood of management-initiated auditor switches (Carcello and Neal 2003; Lennox 2000). Our results highlight the expected benefits to auditors from issuing a going concern report to their financially stressed clients. Specifically, controlling for endogeneity, our evidence indicates that issuing a going concern report lowers the likelihood of investors naming the auditor in a class action lawsuit.

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Figure 1
Timeline on Going Concern Audit Reports and Auditor Litigation

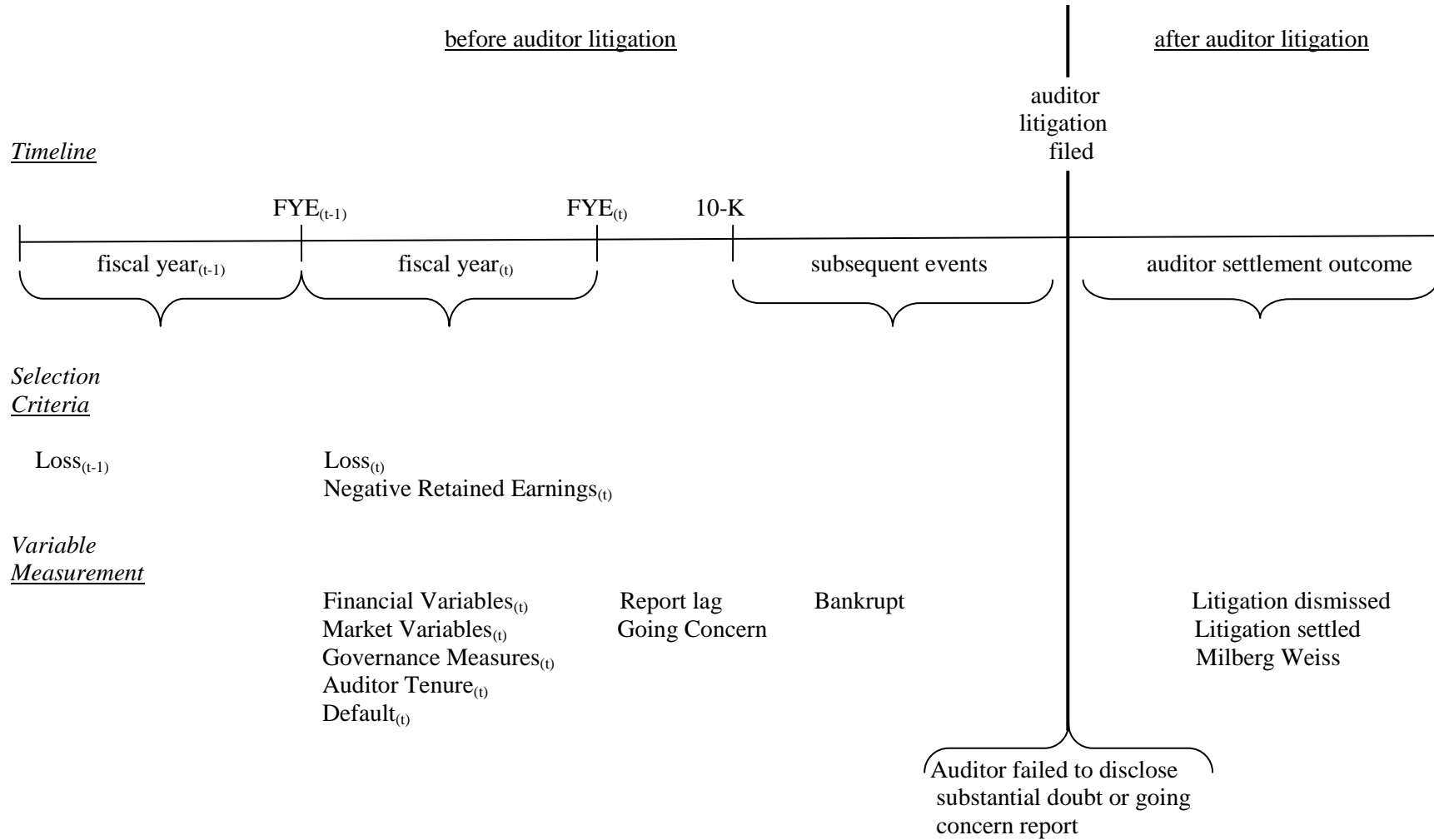


Table 1
Sample Characteristics

Panel A: Sample Selection Criteria

	Number
Securities class action litigation citing the auditor between 1986-2008	1,155
- Firms not on COMPUSTAT or CRSP or market values under \$1million	743
- Firms not experiencing financial distress	261
- Firms not engaging a Big N auditor	<u>17</u>
Final sample of auditor litigation firms	<u>134</u>

Panel B: Auditor Litigation Time Periods

Auditing Litigation Regulations		Frequency	Percentage
Pre-SAS 59	(FYE 1/1/1985-12/31/1988)	16	11.9%
Pre-PSLRA	(FYE 1/1/1989-12/31/1995)	38	28.4%
Pre-SOX	(FYE 1/1/1996-7/31/2002)	49	36.6%
Post-SOX	(FYE 8/1/2002-12/31/2007)	<u>31</u>	<u>23.1%</u>
Total		<u>134</u>	<u>100%</u>

Panel C: Highest Industry Concentration of Auditor Litigation Sample

Industry	Frequency	Percentage
Business Services (SIC = 73)	28	20.9%
Computer and Office Equipment (SIC = 35)	14	10.4%
Communication Services (SIC = 48)	12	9.0%
Others	<u>80</u>	<u>59.7%</u>
Total	<u>134</u>	<u>100%</u>

Panel D: Frequency of Auditor Litigation Cases Noting the Auditor's Report

Litigation Reference	Frequency	Percentage
Auditor failed to disclose substantial doubt or going concern report	49	36.6%
An unqualified or "clean opinion" was issued	18	13.4%
Auditor's report failed to mention material misstatement	11	8.2%
Auditor's report was not mentioned in the complaint	41	30.6%
No complaint was found detailing the auditor's alleged negligence	<u>15</u>	<u>11.2%</u>
Total	<u>134</u>	<u>100%</u>

Table 2
Descriptive Statistics

	Auditor Litigation Sample (n=134)					Control Sample (n=134)				
	Mean	St. Dev.	Q1	Median	Q3	Mean	St. Dev.	Q1	Median	Q3
Assets (millions)	\$1,733	4,048	\$59.7	\$235.3	\$848.5	\$758.8*	2,900	\$21.7	\$90.2**	\$402.7
Return on Assets	-0.403	0.679	-0.481	-0.177	-0.073	-0.351*	0.562	-0.425	-0.163	-0.048
Market Value (millions)	\$1,020	3,016	\$20.1	\$99.4	\$424.1	\$342.5	976.3	\$8.5	\$33.4**	\$225.2
Abnormal Accruals	-0.004	0.167	-0.074	0.003	0.057	-0.025	0.134	-0.047	-0.010	0.023
Stock Return	-0.179	0.707	-0.673	-0.295	-0.007	-0.210	0.507	-0.496	-0.232	-0.025
Financial Condition	0.312	2.265	-1.399	0.055	1.373	-0.110	2.681	-1.662	-0.268	1.287
Sales Growth	0.399	0.952	-0.118	0.059	0.574	0.361	1.044	-0.065	0.052	0.309
Report Lag (days)	69.9	24.0	55	74	90	66.3	25.5	44	68	90
Cash Flow/Assets	-0.100	0.227	-0.131	-0.020	0.021	-0.118	0.289	-0.171	-0.023	0.036
Insider Ownership	0.209	0.226	0.033	0.119	0.299	0.272**	0.227	0.069	0.236*	0.441
Institutional Ownership	0.257	0.259	0.041	0.149	0.435	0.179**	0.225	0.004	0.091**	0.272
Stock Turnover	0.679	0.263	0.520	0.729	0.922	0.503**	0.272	0.285	0.486**	0.721
Variance Returns (*100)	0.519	0.614	0.173	0.359	0.620	0.304**	0.447	0.067	0.162**	0.384
Auditor Tenure	52.2%	-	-	-	-	67.2%*	-	-	-	-
Default	20.1%	-	-	-	-	12.7%	-	-	-	-
CEOCOB	69.4%	-	-	-	-	71.6%	-	-	-	-
Bankrupt	35.8%	-	-	-	-	7.4%**	-	-	-	-
Going Concern Reports	31.3%	-	-	-	-	33.5%	-	-	-	-

Notes: * = $p < 0.05$ and ** = $p < 0.01$. Significance levels are for two-tailed t-tests or chi-square tests. Wilcoxon rank sum tests for differences in medians. Both the litigation and control sample firms experience financial distress. A matched-pairs design was incorporated with the auditor litigation sample being any firm whose auditor was involved in a securities class action lawsuit with the control group matched based upon year, two-digit SIC industry code, and assets.

Table 3
Descriptive Statistics on Auditor Settlement Outcomes

	Auditor Litigation Cases Dismissed (n=52)					Auditor Litigation Cases Settled (n=51)				
	Mean	St. Dev.	Q1	Median	Q3	Mean	St. Dev.	Q1	Median	Q3
Settlement (millions)	0	-	-	-	-	\$14.7	35.3	\$1.5	\$4.8	\$8.5
Assets (millions)	\$1,175	2,613	\$42	\$218	\$647	\$2,073	4,512	\$92	\$270	\$1,458
Market Value (millions)	\$738	2,527	\$14	\$56	\$274	\$763	2,015	\$22	\$138	\$485
Abnormal Accruals	0.010	0.155	-0.070	0.003	0.064	0.011	0.161	-0.063	0.004	0.054
Stock Return	-0.313	0.574	-0.717	-0.401	-0.026	-0.096	0.876	-0.631	-0.225	0.012
Financial Condition	0.843	2.411	-1.059	0.427	2.274	0.256	2.084	-0.822	-0.083	1.100
Growth	0.175	0.623	-0.180	0.034	0.272	0.443	1.177	-0.118	0.042	0.460
Insider Ownership	0.181	0.205	0.019	0.107	0.246	0.232	0.242	0.050	0.126	0.335
Institutional Ownership	0.232	0.259	0.021	0.117	0.418	0.292	0.262	0.086	0.190	0.497
Report Lag (days)	71.0	24.6	55	74	91	73.0	23.6	58	75	91
Going Concern Reports	50.0%	-	-	-	-	25.5%**	-	-	-	-
Auditor Tenure	55.7%	-	-	-	-	54.9%	-	-	-	-
Bankrupt	40.3%	-	-	-	-	37.2%	-	-	-	-
CEOCOB	61.5%	-	-	-	-	74.5%	-	-	-	-
Default	20.8%	-	-	-	-	21.5%	-	-	-	-
Lacked Doubt	21.1%	-	-	-	-	51.0%**	-	-	-	-
Milberg Weiss	23.1%	-	-	-	-	49.0%**	-	-	-	-

Notes: * = $p < 0.05$ and ** = $p < 0.01$. Significance levels are for two-tailed t-tests or chi-square tests. Wilcoxon rank sum tests for differences in medians. The dismissed sample is a subset of the main sample and represents all auditor litigation cases where the auditor was dismissed from the class action litigation. The settlement sample is a subset of the main sample and represents all auditor litigation cases where the auditor paid a cash settlement to resolve the litigation.

Table 4
Results for Auditor Going Concern Reports

Model 1: $GCAR = \alpha + \beta_1 \text{Lawsuit[instrument]} + \beta_2 \text{LMValue} + \beta_3 \text{CFOps} + \beta_4 \text{AbAccruals} + \beta_5 \text{Tenure} + \beta_6 \text{Return} + \beta_7 \text{ZScore} + \beta_8 \text{Growth} + \beta_9 \text{Bankrupt} + \beta_{10} \text{CEOCOB} + \beta_{11} \text{Insider} + \beta_{12} \text{Institutional} + \beta_{13} \text{Default} + \beta_{14} \text{ReportLag} + \varepsilon$

Model 2a: $\text{LAWSUIT} = \alpha + \beta_1 \text{LMValue} + \beta_2 \text{CFOps} + \beta_3 \text{AbAccruals} + \beta_4 \text{Tenure} + \beta_5 \text{Return} + \beta_6 \text{ZScore} + \beta_7 \text{Growth} + \beta_8 \text{Bankrupt} + \beta_9 \text{CEOCOB} + \beta_{10} \text{Insider} + \beta_{11} \text{Institutional} + \beta_{12} \text{Default} + \beta_{13} \text{ReportLag} + \beta_{14} \text{VarReturns} + \beta_{15} \text{Turnover} + \varepsilon$

(n=268)	Exp. Sign	Single-Stage Probit Analysis (Model 1)		2SLS Simultaneous Equation				Bivariate Probit Stage 2 (Model 1)	
		Coeff.	t-value	Stage 1 (Model 2a)		Stage 2 (Model 1)		Coeff.	t-value
				Coeff.	t-value	Coeff.	t-value		
<i>Intercept</i>		-1.533	-1.72	-0.085	-0.56	0.186	1.24	-1.184	-2.72**
<i>Lawsuit</i>	+	0.087	0.56	-	-	-	-	-	-
<i>Lawsuit [instrument]</i>	+	-	-	-	-	1.043	2.66**	0.869	2.10*
<i>LMValue</i>	-/+	0.035	0.36	0.043	2.67**	-0.007	-0.45	-0.042	-0.79
<i>CFOps</i>	-	-2.096	-2.96**	0.098	0.82	-0.363	-3.18**	-1.103	-2.94**
<i>AbAccruals</i>	+	-0.920	-0.78	0.150	0.93	-0.177	-1.15	-0.714	-1.38
<i>Tenure</i>	-	-0.064	-0.18	-0.180	-3.18**	0.009	0.17	0.236	1.23
<i>Return</i>	-	-0.525	-1.64	0.027	0.58	-0.070	-1.58	-0.242	-1.52
<i>ZScore</i>	+	0.254	3.37**	0.020	1.62	0.039	3.26**	0.091	1.99*
<i>Growth</i>	-	-0.018	-0.10	-0.010	-0.34	-0.007	-0.27	-0.019	-0.22
<i>Bankrupt</i>	+	1.615	3.73**	0.369	5.32**	0.199	2.99**	0.129	0.37
<i>CEOCOB</i>	-	-0.414	-1.12	-0.001	-0.02	-0.063	-1.13	-0.171	-0.89
<i>Insider</i>	-	-1.767	-2.29*	-0.119	-0.97	-0.220	-1.87	-0.493	-1.19
<i>Institutional</i>	-	-0.736	-0.89	0.102	0.77	-0.118	-0.94	-0.605	-1.43
<i>Default</i>	+	1.372	3.15**	0.038	0.50	0.221	3.02**	0.576	2.66**
<i>ReportLag</i>	+	0.014	2.00*	0.002	1.84	0.004	2.12*	0.007	2.11*
<i>VarReturns</i>	+	-	-	0.153	3.13**	-	-	-	-
<i>Turnover</i>	+	-	-	0.377	3.36**	-	-	-	-
R ² (pseudo)		0.306	-	0.270	-	0.257	-	-	-
Log Likelihood		-	-	-	-	-	-	-253.8**	-

Notes: * = $p < 0.05$ and ** = $p < 0.01$. Significance levels are for two-tailed t-tests. The dependent variable is $GCAR = 1$ if a client received a going concern audit report, =0 otherwise, or $LAWSUIT = 1$ if the audit firm was involved in a securities lawsuit, =0 otherwise; $LMValue$ = natural log of market value of equity in millions; $CFOps$ = the cash flow from operations, scaled by assets; $AbAccruals$ = the abnormal accruals from the modified Jones model, scaled by lagged assets; $Tenure = 1$ if the auditor-client relationship was four years, or longer, =0 otherwise; $Return$ = the firm's stock return over the fiscal year; $ZScore$ = a composite measure of financial distress based upon Zmijewski (1984); $Growth$ = change in sales from the preceding year; $Bankrupt = 1$ if the firm declared bankruptcy following the last auditor's report, =0 otherwise; $CEOCOB = 1$ if the CEO was also the chairman of the board, =0 otherwise; $Insider$ = the percentage of insider ownership; $Institutional$ = the percentage of institutional ownership; $Default = 1$ if the firm is in default of a debt covenant, =0 otherwise; $ReportLag$ = number of days between FYE and earnings announcement date; $VarReturns$ = the variance of the abnormal returns for the 12 months prior to the FYE, times 100; and $Turnover$ = the probability that a share has been traded at least once during the fiscal year ($1 - \Pi(1 - \text{daily turnover rate})$). All continuous variables are winsorized at the 1% and 99% levels.

Table 5
Results for Auditor Litigation

Model 1a: $GCAR = \alpha + \beta_1 LMValue + \beta_2 CFOps + \beta_3 AbAccruals + \beta_4 Tenure + \beta_5 Return + \beta_6 ZScore + \beta_7 Growth + \beta_8 Bankrupt + \beta_9 CEOCOB + \beta_{10} Insider + \beta_{11} Institutional + \beta_{12} Default + \beta_{13} ReportLag + \beta_{14} VarReturns + \beta_{15} Turnover + \varepsilon$

Model 2: $LAWSUIT = \alpha + \beta_1 GCAR[instrument] + \beta_2 LMValue + \beta_3 CFOps + \beta_4 AbAccruals + \beta_5 Tenure + \beta_6 Return + \beta_7 ZScore + \beta_8 Growth + \beta_9 Bankrupt + \beta_{10} CEOCOB + \beta_{11} Insider + \beta_{12} Institutional + \beta_{13} VarReturns + \beta_{14} Turnover + \varepsilon$

(n=268)	Exp. Sign	Single-Stage Probit Analysis (Model 2)		2SLS Simultaneous Equation				Bivariate Probit Stage 2 (Model 2)	
		Coeff.	t-value	Stage 1 (Model 1a)		Stage 2 (Model 2)		Coeff.	t-value
				Coeff.	t-value	Coeff.	t-value		
<i>Intercept</i>		-1.854	-2.99**	0.196	1.40	0.002	0.01	-1.441	-4.40**
<i>GCAR</i>	-	-0.272	-1.40	-	-	-	-	-	-
<i>GCAR [instrument]</i>	-	-	-	-	-	-1.164	-2.88**	-0.943	-2.07*
<i>LMValue</i>	+/-	0.219	2.42*	-0.006	-0.40	0.042	2.40*	0.129	2.56*
<i>CFOps</i>	-	-0.002	-0.01	-0.363	-3.25**	0.099	0.76	0.447	1.15
<i>AbAccruals</i>	+	0.419	0.49	-0.175	-1.15	0.153	0.87	0.402	0.87
<i>Tenure</i>	-	-1.189	-3.56**	0.010	0.18	-0.189	-3.12**	-0.582	-2.97**
<i>Return</i>	-	0.113	0.37	-0.070	-1.62	0.026	0.51	0.138	0.89
<i>ZScore</i>	+	0.099	1.60	0.039	3.32**	0.020	1.51	0.025	0.50
<i>Growth</i>	-	-0.017	-0.11	-0.007	-0.27	-0.011	-0.35	-0.021	-0.24
<i>Bankrupt</i>	+	2.800	5.40**	0.198	3.04**	0.365	4.86**	0.895	2.30*
<i>CEOCOB</i>	-	-0.127	-0.38	-0.063	-1.14	-0.001	-0.01	0.041	0.23
<i>Insider</i>	-	-1.157	-1.62	-0.221	-1.92	-0.117	-0.88	-0.216	-0.52
<i>Institutional</i>	-	0.355	0.47	-0.114	-0.91	0.090	0.63	0.348	0.85
<i>Default</i>	+	-	-	0.221	3.09**	-	-	-	-
<i>ReportLag</i>	+	-	-	0.004	2.04*	-	-	-	-
<i>VarReturns</i>	+	1.134	3.05**	0.022	0.49	0.154	2.91**	0.468	2.20*
<i>Turnover</i>	+	2.224	3.31**	0.032	0.31	0.364	3.01**	1.042	2.77**
R ² (pseudo)		0.325	-	0.265	-	0.234	-	-	-
Log Likelihood		-	-	-	-	-	-	-253.6**	-

Notes: * = p < 0.05 and ** = p < 0.01. Significance levels are for two-tailed t-tests. The dependent variable is *GCAR* = 1 if a client received a going concern audit report, =0 otherwise, or *LAWSUIT*, =1 if the audit firm was involved in a securities lawsuit, =0 otherwise; *LMValue* = natural log of market value of equity in millions; *CFOps* = the cash flow from operations, scaled by assets; *AbAccruals* = the abnormal accruals from the modified Jones model, scaled by lagged assets; *Tenure* = 1 if the auditor-client relationship was four years, or longer, =0 otherwise; *Return* = the firm's stock return over the fiscal year; *ZScore* = a composite measure of financial distress based upon Zmijewski (1984); *Growth* = change in sales from the preceding year; *Bankrupt* = 1 if the firm declared bankruptcy following the last auditor's report, =0 otherwise; *CEOCOB* = 1 if the CEO was also the chairmen of the board, =0 otherwise; *Insider* = the percentage of insider ownership; *Institutional* = the percentage of institutional ownership; *Default* = 1 if the firm is in default of a debt covenant, =0 otherwise; *ReportLag* = number of days between FYE and earnings announcement date; *VarReturns* = the variance of the abnormal returns for the 12 months prior to the FYE, times 100; and *Turnover* = the probability that a share has been traded at least once during the fiscal year (1-Π(1-daily turnover rate)). All continuous variables are winsorized at the 1% and 99% levels.

Table 6
Results for Dismissal of Auditor Lawsuit

Model 1b: $GCAR = \alpha + \beta_1 LMValue + \beta_2 CFOps + \beta_3 AbAccruals + \beta_4 Tenure + \beta_5 Return + \beta_6 ZScore + \beta_7 Growth + \beta_8 Bankrupt + \beta_9 CEOCOB + \beta_{10} Insider + \beta_{11} Institutional + \beta_{12} Default + \beta_{13} ReportLag + \beta_{14} LackedDoubt + \beta_{15} MilbergWeiss + \varepsilon$

Model 3a: $DISMISSED = \alpha + \beta_1 GCAR[instrument] + \beta_2 LMValue + \beta_3 CFOps + \beta_4 AbAccruals + \beta_5 Tenure + \beta_6 Return + \beta_7 ZScore + \beta_8 Growth + \beta_9 Bankrupt + \beta_{10} CEOCOB + \beta_{11} Insider + \beta_{12} Institutional + \beta_{13} LackedDoubt + \beta_{14} MilbergWeiss + \varepsilon$

(n=103)	Exp. Sign	Single-Stage Probit Analysis (Model 3a)		2SLS Simultaneous Equation				Bivariate Probit Stage 2 (Model 3a)	
		Coeff.	t-value	Stage 1 (Model 1b)		Stage 2 (Model 3a)		Coeff.	t-value
				Coeff.	t-value	Coeff.	t-value		
<i>Intercept</i>		1.489	1.51	0.029	0.14	0.966	4.17**	0.949	1.37
<i>GCAR</i>	+	0.797	1.35	-	-	-	-	-	-
<i>GCAR [instrument]</i>	+	-	-	-	-	-0.241	-0.91	0.458	0.39
<i>LMValue</i>	+/-	0.144	0.86	0.007	0.26	0.023	0.67	0.090	0.90
<i>CFOps</i>	-	0.710	0.56	-0.307	-1.40	0.092	0.33	0.444	0.54
<i>AbAccruals</i>	+	-0.521	-0.38	0.090	0.36	-0.101	-0.32	-0.303	-0.36
<i>Tenure</i>	-	0.029	0.06	0.050	0.58	0.018	0.17	-0.003	-0.01
<i>Return</i>	-	0.124	0.31	-0.111	-1.75	-0.010	-0.13	0.070	0.25
<i>ZScore</i>	-	0.075	0.60	0.050	2.43*	0.025	0.94	0.050	0.51
<i>Growth</i>	-	-0.241	-0.85	0.039	0.80	-0.040	-0.65	-0.147	-0.79
<i>Bankrupt</i>	-/+	-0.164	-0.31	0.253	2.85**	0.028	0.25	-0.098	-0.21
<i>CEOCOB</i>	-	-0.562	-1.09	-0.089	-1.04	-0.120	-1.10	-0.365	-1.15
<i>Insider</i>	-	-2.218	-1.83	-0.263	-1.33	-0.479	-1.93	-1.414	-1.79
<i>Institutional</i>	-	-1.286	-1.09	-0.009	-0.04	-0.292	-1.14	-0.786	-1.10
<i>Default</i>	+	-	-	0.185	1.81	-	-	-	-
<i>ReportLag</i>	+	-	-	0.003	1.83	-	-	-	-
<i>LackedDoubt</i>	-	-1.721	-3.17**	-0.036	-0.41	-0.352	-3.19**	-1.052	-3.29**
<i>MilbergWeiss</i>	-	-1.153	-2.11*	-0.179	-1.71	-0.264	-2.34*	-0.717	-2.01*
R ² (pseudo)		0.244	-	0.351	-	0.100	-	-	-
Log Likelihood		-	-	-	-	-	-	-96.0**	-

Notes: * = p < 0.05 and ** = p < 0.01. Significance levels are for two-tailed t-tests. The dependent variable is $GCAR = 1$ if a client received a going concern audit report, =0 otherwise, or $DISMISSED = 1$ if the auditor litigation case was dismissed, =0 otherwise; $LMValue$ = natural log of market value of equity in millions; $CFOps$ = the cash flow from operations, scaled by assets; $AbAccruals$ = the abnormal accruals from the modified Jones model, scaled by lagged assets; $Tenure = 1$ if the auditor-client relationship was four years, or longer, =0 otherwise; $Return$ = the firm's stock return over the fiscal year; $ZScore$ = a composite measure of financial distress based upon Zmijewski (1984); $Growth$ = change in sales from the preceding year; $Bankrupt = 1$ if the firm declared bankruptcy following the last auditor's report, =0 otherwise; $CEOCOB = 1$ if the CEO was also the chairmen of the board, =0 otherwise; $Insider$ = the percentage of insider ownership; $Institutional$ = the percentage of institutional ownership; $Default = 1$ if the firm is in default of a debt covenant, =0 otherwise; $ReportLag$ = number of days between FYE and earnings announcement date; $LackedDoubt = 1$ if the litigation complaint mentioned that the auditor failed to disclose substantial doubt or a going concern report, =0 otherwise; and $MilbergWeiss = 1$ if the law firm Milberg Weiss was attached to the lawsuit, = 0 otherwise. All continuous variables are winsorized at the 1% and 99% levels.

Table 7
Results for Auditor Litigation Settlements

Model 1b: $GCAR = \alpha + \beta_1 LMValue + \beta_2 CFOps + \beta_3 AbAccruals + \beta_4 Tenure + \beta_5 Return + \beta_6 ZScore + \beta_7 Growth + \beta_8 Bankrupt + \beta_9 CEOCOB + \beta_{10} Insider + \beta_{11} Institutional + \beta_{12} Default + \beta_{13} ReportLag + \beta_{14} LackedDoubt + \beta_{15} MilbergWeiss + \epsilon$

Model 3b: $LSETTLEMENTS = \alpha + \beta_1 GCAR[instrument] + \beta_2 LMValue + \beta_3 CFOps + \beta_4 AbAccruals + \beta_5 Tenure + \beta_6 Return + \beta_7 ZScore + \beta_8 Growth + \beta_9 Bankrupt + \beta_{10} CEOCOB + \beta_{11} Insider + \beta_{12} Institutional + \beta_{13} LackedDoubt + \beta_{14} MilbergWeiss + \epsilon$

(n=51)	Exp. Sign	OLS Analysis (Model 3b)		Simultaneous Equation			
		Coeff.	t-value	Stage 1 (Model 1b)		Stage 2 (Model 3b)	
				Coeff.	t-value	Coeff.	t-value
<i>Intercept</i>		0.764	1.27	-0.083	-0.33	0.705	1.07
<i>GCAR</i>	-	-0.790	-1.54	-	-	-	-
<i>GCAR [instrument]</i>	-	-	-	-	-	-0.394	-0.47
<i>LMValue</i>	+/-	0.281	2.04*	-0.007	-0.17	0.305	2.19*
<i>CFOps</i>	-	0.852	0.96	-0.263	-1.05	1.052	1.18
<i>AbAccruals</i>	+	0.057	0.05	0.620	2.21*	-0.430	-0.42
<i>Tenure</i>	-	0.384	1.06	0.087	0.85	0.324	0.89
<i>Return</i>	-	-0.345	-1.55	-0.126	-2.02*	-0.224	-1.06
<i>ZScore</i>	+	0.150	1.43	0.079	2.87**	0.087	0.88
<i>Growth</i>	-	0.032	0.22	0.002	0.04	0.019	0.13
<i>Bankrupt</i>	-/+	-0.072	-0.19	0.162	1.56	-0.206	-0.56
<i>CEOCOB</i>	-	-0.222	-0.53	-0.169	-1.37	-0.130	-0.31
<i>Insider</i>	-	-0.442	-0.54	0.127	0.54	-0.585	-0.73
<i>Institutional</i>	-	-0.487	-0.51	0.003	0.01	-0.532	-0.58
<i>Default</i>	+	-	-	0.337	3.35**	-	-
<i>ReportLag</i>	+	-	-	0.003	1.01	-	-
<i>LackedDoubt</i>	+	0.190	0.51	0.027	0.26	0.158	0.42
<i>MilbergWeiss</i>	+	0.030	0.09	-0.100	-0.98	0.086	0.24
R ² (adj) or (pseudo)		0.115	-	0.502	-	0.071	-

Notes: * = p < 0.05 and ** = p < 0.01. Significance levels are for two-tailed t-tests. The dependent variable is *GCAR* = 1 if a client received a going concern audit report, =0 otherwise, or *LSETTLEMENT* = the log of the legal settlement paid by the auditor; *MValue* = natural log of market value of equity in millions; *CFOps* = the cash flow from operations, scaled by assets; *AbAccruals* = the abnormal accruals from the modified Jones model, scaled by lagged assets; *Tenure* = 1 if the auditor-client relationship was four years, or longer, =0 otherwise; *Return* = the firm's stock return over the fiscal year; *ZScore* = a composite measure of financial distress based upon Zmijewski (1984); *Growth* = change in sales from the preceding year; *Bankrupt* = 1 if the firm declared bankruptcy following the last auditor's report, =0 otherwise; *CEOCOB* = 1 if the CEO was also the chairmen of the board, =0 otherwise; *Insider* = the percentage of insider ownership; *Institutional* = the percentage of institutional ownership; *Default* = 1 if the firm is in default of a debt covenant, =0 otherwise; *ReportLag* = number of days between FYE and earnings announcement date; *LackedDoubt* = 1 if the litigation complaint mentioned that the auditor failed to disclose substantial doubt or a going concern report, =0 otherwise; and *MilbergWeiss* = 1 if the law firm Milberg Weiss was attached to the lawsuit, = 0 otherwise. All continuous variables are winsorized at the 1% and 99% levels.

Table 8
Results of Partitioned Samples

$$\text{Model 1: } GCAR = \alpha + \beta_1 \text{Lawsuit[instrument]} + \beta_2 \text{LMValue} + \beta_3 \text{CFOps} + \beta_4 \text{AbAccruals} + \beta_5 \text{Tenure} + \beta_6 \text{Return} + \beta_7 \text{ZScore} + \beta_8 \text{Growth} + \beta_9 \text{Bankrupt} + \beta_{10} \text{CEOCOB} + \beta_{11} \text{Insider} + \beta_{12} \text{Institutional} + \beta_{13} \text{Default} + \beta_{14} \text{ReportLag} + \varepsilon$$

$$\text{Model 2: } LAWSUIT = \alpha + \beta_1 \text{GCAR[instrument]} + \beta_2 \text{LMValue} + \beta_3 \text{CFOps} + \beta_4 \text{AbAccruals} + \beta_5 \text{Tenure} + \beta_6 \text{Return} + \beta_7 \text{ZScore} + \beta_8 \text{Growth} + \beta_9 \text{Bankrupt} + \beta_{10} \text{CEOCOB} + \beta_{11} \text{Insider} + \beta_{12} \text{Institutional} + \beta_{13} \text{VarReturns} + \beta_{14} \text{Turnover} + \varepsilon$$

	Single Stage Probit Analysis {Lawsuit}		2 SLS Stage 2 {Lawsuit[instrument]}		Single Stage Probit Analysis {GCAR}		2 SLS Stage 2 {GCAR[instrument]}	
	Coeff.	t-value	Coeff.	t-value	Coeff.	t-value	Coeff.	t-value
<i>(All Firms with FYEs from 1/1/85-12/31/07; n=268)</i>								
Model 1	0.087	0.56	1.043	2.66**	-	-	-	-
Model 2	-	-	-	-	-0.272	-1.40	-1.164	-2.88**
<i>(All Post-SAS 59 firms with FYEs from 1/1/89-12/31/07; n=236)</i>								
Model 1	0.104	0.61	1.392	3.13**	-	-	-	-
Model 2	-	-	-	-	-0.420	-1.75	-1.519	-3.31**
<i>(Pre-PSLRA firms with FYEs from 1/1/85-12/31/95; n=108)</i>								
Model 1	0.036	0.21	0.956	2.22*	-	-	-	-
Model 2	-	-	-	-	-0.294	-1.33	-0.946	-2.17*
<i>(Post-PSLRA firms with FYEs from 1/1/96-12/31/07; n=160)</i>								
Model 1	0.285	0.96	1.815	3.07**	-	-	-	-
Model 2	-	-	-	-	-0.327	-1.16	-1.781	-3.04**
<i>(All non-financial firms with FYEs from 1/1/85-12/31/07; n=220)</i>								
Model 1	0.126	0.71	1.120	2.56*	-	-	-	-
Model 2	-	-	-	-	-0.251	-1.03	-1.252	-2.81**

Notes: * = p < 0.05 and ** = p < 0.01. Significance levels are for two-tailed t-tests. The dependent variable is *GCAR* = 1 if a client received a going concern audit report, =0 otherwise, or *LAWSUIT*, =1 if the audit firm was involved in a securities lawsuit, =0 otherwise; *LMValue* = natural log of market value of equity in millions; *CFOps* = the cash flow from operations, scaled by assets; *AbAccruals* = the abnormal accruals from the modified Jones model, scaled by lagged assets; *Tenure* = 1 if the auditor-client relationship was four years, or longer, =0 otherwise; *Return* = the firm's stock return over the fiscal year; *ZScore* = a composite measure of financial distress based upon Zmijewski (1984); *Growth* = change in sales from the preceding year; *Bankrupt* = 1 if the firm declared bankruptcy following the last auditor's report, =0 otherwise; *CEOCOB* = 1 if the CEO was also the chairman of the board, =0 otherwise; *Insider* = the percentage of insider ownership; *Institutional* = the percentage of institutional ownership; *Default* = 1 if the firm is in default of a debt covenant, =0 otherwise; *ReportLag* = number of days between FYE and earnings announcement date; *VarReturns* = the variance of the abnormal returns for the 12 months prior to the FYE, times 100; and *Turnover* = the probability that a share has been traded at least once during the fiscal year (1- Π (1-daily turnover rate)). All continuous variables are winsorized at the 1% and 99% levels.

Appendix—Auditor Litigation Examples
(shading added)

In re Cascade Intern. Securities Litigation, 840 F.Supp. 1558 (S.D.Fla. 1993)

Plaintiffs respond by arguing that their Complaint sufficiently demonstrates that C & L was not a minimal participant in the auditing of Cascade, but in fact gave extensive advice to Cascade. Plaintiffs argue as evidence of C & L's liability the fact that C & L failed to issue "going concern" opinions on Fran's and Conston despite "red flags" that Cascade was in financial difficulty, and that C & L failed to consolidate Conston's financial statements with Cascade's, thus allowing Cascade to avoid reporting Conston's significant losses, in violation of established accounting procedures. Furthermore, after C & L received Cascade's 10-K, it failed to withdraw its opinion on Fran's or Conston despite the gross errors it knew were contained in the 10-K.

Official Comm. v. Investcorp S.A. et. al., 80 F. Supp. 2d 129, 135 (S.D.N.Y. 1999)

In March 1994, after the 1993 Transaction had closed, Coopers audited Color Tile and gave an unqualified opinion that Color Tile's 1993 financial statements were prepared in accordance with generally accepted accounting principles and presented fairly the financial position of Color Tile as of January 2, 1994. Coopers failed to disclose that there was a substantial doubt that Color Tile had the ability to continue as a going concern and failed to value Color Tile on a liquidation basis or write down the company's approximately \$270 million in goodwill.

In re Warnaco Group, Inc. Securities Litigation, 388 F.Supp.2d 307 (S.D.N.Y. 2005)

Finally, plaintiffs argue that Deloitte is responsible for the misstatements made in the FY2000 financial statement. This statement is alleged to have been audited by Deloitte and to have contained numerous significant falsehoods. Deloitte responds that, because its audit opinion included a "going concern" qualification, the financial statement as a whole could not, as a matter of law, be deemed misleading. Deloitte cites no authority for the proposition that a "going concern" qualification insulates a public auditor from any liability for material misstatements made in conjunction with the qualification. *But see Drabkin v. Alexander Grant & Co.*, 284 U.S. App. D.C. 348, 905 F.2d 453, 455-56 (D.C. Cir. 1990) ("Issuing a going concern opinion may not insulate an accounting firm from liability but it must cut strongly in its favor."); *see also In re Spiegel, Inc. Sec. Litig.*, 382 F. Supp. 2d 989, 2004 U.S. Dist. LEXIS 12648, No. 02 C 8946, 2004 WL 1535844, at *42 (N.D. Ill. July 8, 2004) ("Nor is [accounting firm] entitled to dismissal because it threatened to issue a going concern statement in the 2001 Form 10-K and 'never backed down.'"). Although the fact finder may determine that the financial statement as a whole was not misleading, it cannot be so deemed as a matter of law solely by reason of Deloitte's "going concern" qualification.