

Restated Financial Statements and Auditor Litigation

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Abstract: This study provides evidence on the restatement circumstances associated with lawsuits against auditors. We examine restatements of financial statements previously issued to the public and filed with the SEC by 416 US companies that announced restatements from 1995 to mid-1999. Our examination focuses on the accounting issues giving rise to restatements. We classify these issues as either economic or technical. Economic restatements involve transactions and accounts related to core (recurring) earnings; all other restatements are technical. We find that auditors are significantly more likely to be sued over economic restatements than technical ones. Additionally, we find that revenue restatements, one type of economic restatement and overall the most frequent, primarily contribute to this result. While economic restatements are associated with more severe circumstances as measured by fraud, materiality, bankruptcy/delisting, and security price reaction, our multivariate model includes these as control variables.

Key Words: Restatements, Auditor Litigation, Securities Class Actions, Audit and Reporting Quality

Data Availability: Data are available from sources indicated in the text.

I. Introduction

A restatement provides an explicit acknowledgement of material omissions or misstatements in the original financial statements. So it is not surprising that restatements engender concerns not only about the quality of financial reporting but about the quality of services rendered by independent auditors.¹ Evidence suggesting an increase in the frequency of restatements has exacerbated these concerns.² Statements by the SEC's Chief Accountant indicate that the SEC considers restatements to be audit failures (Turner 1999), and concern over restatements contributed to SEC Chairman Levitt urging the Public Oversight Board to appoint the Panel on Audit Effectiveness in late 1998.³

By definition, restatements involve non-GAAP financial statements, though they represent a continuum of GAAP departures, from minor to severe. However, restatements do not, by definition, involve non-GAAS audits. While the SEC views restatements as audit failures, it is an open question whether market participants do likewise. One approach to addressing this question is to examine auditor litigation in the context of restatements. Auditor liability to users requires both non-GAAP (substandard) financial statements and non-GAAS (substandard) audits (see Kinney 1993). On the subset of restatements with auditor litigation, users allege non-GAAS audits and, therefore, that the auditors bear some responsibility for the losses they suffered due to non-GAAP financial reporting.

As further motivation for our examination of auditor litigation on restatements recognize that, while restatements per se impose some costs on auditors, either directly or

¹ For discussions of restatements, see Bartlett (1998), *Public Accounting Report* (1998), Loomis (1999), and Berton (2000).

² Foster et al. (1999) and Walker (1999) report an increase in the frequency of restatements in class action litigation of 750% from 1992 to 1998.

³ An independent private sector body, the Public Oversight Board (POB) was created in 1977 to oversee and report on the self-regulatory programs of the SEC Practice Section of the AICPA. The Panel on Audit Effectiveness was appointed after Chairman Levitt's September 28, 1998 earnings management speech ("The Numbers Game") at NYU Center for Law and Business. The Panel's *Report and Recommendations* (August 31, 2000) is available at www.pobauditpanel.org.

indirectly,⁴ these costs likely increase with litigation. Therefore, understanding the circumstances of litigation against auditors on restatements is important.

Research indicates that restatements increase the risk of securities class actions (Jones and Weingram 1996) including actions against auditors (Fuerman and Sawyer 1997, Fuerman 1999). However, there is only limited evidence on litigation over restatements. Kinney and McDaniel (1989) found relatively few lawsuits in their sample of quarterly restatements from 1976 to 1985, with perhaps only one involving the auditor.⁵ Other restatement studies by DeFond and Jiambalvo (1991)⁶ and Sennetti and Turner (1999),⁷ describing characteristics of restatements companies, do not consider litigation.

In our examination of the circumstances associated with litigation against auditors, the accounting issues giving rise to restatements are a primary interest. These accounting issues are at the intersection of financial reporting quality and audit quality. Though compliance (noncompliance) with GAAS by auditors on engagements with restatements cannot be determined without access to private information, companies provide some information about their non-GAAP accounting when restating. Analysis of this evidence allows insights not only on which financial reporting practices are the subject of misstatements but also on audit effectiveness (ineffectiveness) in detecting

⁴ Indirect costs include reputation effects. While indirect costs likely would be more severe with litigation and specific allegations of non-GAAP audits, they nonetheless could occur without such allegations because ex ante (expected) and ex post (actual) audit quality differed on restatements including those with GAAS audits.

⁵ Kinney and McDaniel (1989) report that less than 14% of their sample companies were sued either by stockholders or the SEC over their quarterly restatements. Their sample consisted of 73 companies in NAARS that disclosed quarterly restatements in a footnote to their 1976 to 1985 year-end annual financial statements. They found that, relative to their industry, restating companies were smaller, less profitable, slower growing, had higher debt, and faced more serious uncertainties. And, the average stock returns between the issuance of erroneous quarterly statements and corrections of them were negative.

⁶ DeFond and Jiambalvo (1991), based on a small sample of 41 companies with prior period adjustments correcting annual earnings overstatement errors from 1977 to 1988, found that restatement companies tended to have diffuse ownership, lower growth in earnings, relatively fewer income-increasing GAAP alternatives, and were less likely to have audit committees compared to control companies without restatements. In addition, the overstatements were negatively correlated with the growth in earnings.

⁷ Sennetti and Turner (1999) developed a model for identifying a conditional restatement risk using a sample of 116 companies with error restatements from 1981 to 1994. They found restatement companies compared to other same-industry companies have higher debt ratios, and lower asset size, revenue, income, and profitability ratios. The two groups did not differ in market measures, beta or its change in the year of restatement.

these misstatements. We classify the variety of accounting issues giving rise to restatements into two general categories—economic and technical. We expect, as subsequently explained, that auditors are more likely to be sued over economic restatements.

To understand the role of accounting issues, along with other factors, in auditor litigation over restatements, we compare restatement companies with auditor litigation to those with no litigation and to those with litigation against defendants other than auditors (such as companies, officers, and directors) (other litigation). We include separate comparisons to no litigation and other litigation restatements to address the continuum of restatements. In no litigation restatements, auditors may have avoided litigation simply because financial statement users did not experience losses attributable to restatements, or because losses may have been insufficient to justify the costs of litigation. On the other hand, other litigation restatements have losses significant enough to involve lawsuits. Thus, other litigation restatements appear to be qualitatively different from no litigation restatements.⁸ Still, audit failure is not alleged as a cause of losses on other litigation, so they provide an important test of the factors that are associated with such allegations.

While our study includes both annual and quarterly restatements, we provide some analysis of annual versus quarterly only restatements. Annual financial statements are audited prior to their release but quarterly statements are only reviewed by independent auditors.⁹ Such reviews do not provide a basis for expressing an opinion, only negative-type assurances can be given.¹⁰ Quarterly reviews from 1995 to 1999 could have been performed either timely (i.e., before issuance of the quarterly statements)

⁸ For example, client size tends to significantly differ between auditor and no litigation companies but not between auditor and other litigation companies (e.g., see Carcello and Palmrose 1994, Bonner et al. 1998). Since most lawsuits sampled, whether or not auditors are defendants, are securities class actions, this evidence may reflect the economics of plaintiff attorney decision-making under contingent fee arrangements. Misstatements on smaller companies may involve expected settlements (judgments) of insufficient magnitude to make litigation worthwhile from the standpoint of these “entrepreneurial” attorneys, even considering potential defendants, such as auditors, and insurance coverage, including any officers’ and directors’ (D&O) insurance (see Palmrose 1991, Kinney 1998).

⁹ Guidance on review procedures is provided by Statement on Auditing Standards (SAS) No. 71, *Interim Financial Information* (May 1992). Review procedures generally are limited to inquiries and analytical procedures.

¹⁰ The auditor states that he or she is not aware of any material modifications that should be made to the statements (quarterly financial information) for them to be in conformity with GAAP.

or retrospectively during annual audits. Thus, auditors may or may not have reviewed quarterly statements at the time of their issuance; but they did so by the conclusion of the annual (year-end) audit. Because quarterly statements are not audited, may not have been timely reviewed, and even if timely reviewed may not be associated with an audit report,¹¹ auditors' responsibilities related to interim restatements differ from restatements of annual financial statements. While auditors can be sued over quarterly restatements, litigation against auditors appears less likely on restatements involving only interim periods.¹² Furthermore, interim restatements can result from effective annual audits.

The remaining sections of the paper are organized as follows. The next section discusses our classification scheme for economic versus technical restatements. Subsequent sections describe the sample selection process and the sample, explain the multivariate model we use for testing the role of economic and technical restatements in auditor litigation, present our multivariate results, and provide summary and concluding remarks. The appendix overviews some institutional issues related to disclosure requirements and auditor responsibilities for restatements.

II. Non-GAAP Accounting and Auditor Litigation

In classifying accounting issues, not surprisingly, balance sheet and income statement accounts appear to be the primary scheme used by researchers and others. For example, studies of audit detected accounting adjustments, whether recorded or waived (see, Kinney and Martin 1994), and of misstated financial statements, whether fraud (e.g., Loebbecke et al. 1989) or restatements (e.g., see DeFond and Jiambalvo 1991), generally use this scheme. In connection with earnings management and restatements, the SEC

¹¹ Information on timely reviews can be communicated informally to management and/or the board of directors or formally in a written report. Formal review reports may or may not be attached to Form 10-Q's filed with the SEC. Companies not attaching the report are not allowed to mention the timely review in the Form 10-Q, but otherwise are not constrained from discussing it (Ettredge et al. 1994). A search by Ettredge et al. of Form 10-Q's for 1987-1989 on Compustat's PC Plus Corporate Text database revealed that less than 8% of the database companies attached review letters. In early 2000, the Auditing Standards Board issued SAS No. 90 on *Audit Committee Communications* that amends SAS No. 71 on *Interim Financial Information* to require auditors of SEC clients to attempt to discuss with the audit committee matters described in SAS No. 61 on *Communication with Audit Committees* (as amended) prior to the filing of Form 10-Q's or, if applicable, prior to a public announcement of interim information.

¹² Bonner et al. (1998) found this to be the case in examining companies with SEC enforcement actions and comparing those with auditor and other litigation. However, interim only financial statements was not a significant variable in their comparisons of companies with auditor and no litigation.

focused on a few accounting practices, including revenue recognition, restructuring charges, in-process research and development write-offs (IPR&D), and cookie jar reserves; but these practices can likewise be associated with certain financial statement accounts or balances. Still, there are a few other classifications. Bonner et al. (1998) developed a fraud taxonomy based on schemes used to perpetrate frauds. Kinney (1998) classified potential misstatements into hard numbers, allocations, accounting estimates, and uncertainties (p. 147).

Our scheme is based on the distinction between economic and technical restatements. It recognizes the particular relevance of core (recurring) earnings to users and classifies restatements of transactions and accounts affecting core earnings as economic.¹³ Thus, economic restatements involve misstatements of income statement (and related balance sheet) accounts such as revenue (receivables), cost of goods sold (inventory), and operating expenses (liabilities or assets) including depreciation expense (property, plant and equipment). Economic restatements can arise from errors in recording current transactions, whether completed (e.g., cash sales) or uncompleted (e.g., credit sales), or they can be due to recording nonexistent transactions or to prematurely (delaying) recording otherwise legitimate transactions.¹⁴

We classify all other restatements as technical restatements. Technical restatements involve departures from accounting guidelines in recording amounts affecting non-core (nonrecurring) earnings (e.g., goodwill amortization, in-process research and development (IPR&D),¹⁵ and restructuring charges). Technical restatements also could involve uncertainties about the eligibility for certain practices under GAAP (e.g., pooling versus purchase accounting for business combinations). Thus

¹³ For discussions of the importance to users of core earnings see, for example, Beaver (1981) (on earnings persistence), Revsine et al. (1999), Jonas and Blanchet (2000), and Wild et al. (2000).

¹⁴ Another way of framing this is that financial statement amounts are ratios; they are money per something. Economic restatements involve misstatements of the money (prices or costs) and/or the per (quantities) for goods and services acquired, sold, used, or maintained for future sale or use (see Brown and Palmrose, in process).

¹⁵ IPR&D restatements also are an example of restatements that may involve uncertainties about GAAP, or at least SEC positions on GAAP.

our scheme extends the extant literature by considering not only the account involved, but the nature of the information conveyed by the account.

We expect that auditors are more likely to be sued over economic restatements. Management has primary responsibility for the financial statements including the choice of accounting principles; the auditor opines that the financial statements are fairly presented in accordance with GAAP. Although both economic and technical restatements involve non-GAAP reporting on which auditors rendered incorrect opinions,¹⁶ given the central importance of core earnings to users of financial statements, when restatements occur, we expect that users are more likely to look beyond management to the responsibilities of auditors for economic restatements. This is not to suggest that litigation over technical restatements will not occur, only that it is less likely to include auditors as defendants.¹⁷

While our categorization of accounting issues neither involves determining whether management intentionally (fraudulently) or accidentally (erroneously) misstated the financial statements nor relies on the direction of the misstatement (overstatement or understatement) (Kinney and Martin 1994), we control for these factors in our multivariate analyses. Further, our categorization does not rely on misstatement frequencies (Bonner et al. 1998). Although, Bonner et al. found revenue frauds to be one of the most frequent types of fraud in their sample and, as it turns out, revenue restatements have the highest frequency in ours. Finally, unlike Kinney (1998), economic restatements can involve “hard numbers” along with allocations, estimates, and uncertainties.¹⁸ For example, a software revenue restatement could have been due to either judgments on allocations, estimates, and uncertainties over the currently

¹⁶ Restatements represent bad news (irrespective of the affect on earnings) in the sense that they indicate that management provided erroneous or manipulated financial information to users and the errors or irregularities went undetected by control systems as well as being undetected and/or undisclosed by independent auditors.

¹⁷ *Securities Class Action Alert* (April 2000) notes that “shareholder class actions involving restated earnings were once considered ‘admitted [securities] fraud’ and a slam-dunk” until the recent “surprise move” by a district court judge in Arizona dismissing a shareholder suit over a restatement (p. 64). This class action was over a technical restatement; the auditor was not a defendant.

¹⁸ Kinney (1998) defines hard number misstatements as those where the “numbers attached to physical and fiscal quantities of items that result from primary transactions such as cash, receivables, inventory, fixed asset additions, accounts payable, and the related revenues and cost of sales” are misstated (p. 147).

recognized versus deferred portion of revenue or errors in recording the “hard numbers” (see, PricewaterhouseCoopers 1999).

III. Sample and Descriptive Statistics

Sample

Our sample of restatements was selected from Lexis-Nexis News Library, Lexis Disclosure of other corporate events, and Form 8-K's on Lexis using key-word searches for restatements (e.g., restat, revis, adjust, error) and for specific accounting issues (e.g., in process research). Also, we expanded our key-words to recognize that some companies describe restatements in other ways (e.g., “responding to guidance from the SEC”). Finally, we added some companies mentioned in other sources discussing restatements, specific accounting issues (e.g., in-process research and development), or the SEC's earnings management initiatives.

We included restatements on U.S. companies where the first disclosure that the company may (will) restate occurred between January 1, 1995 and June 30, 1999,¹⁹ and where the company did indeed file amended Form 10-K(s) or Form 10-Q(s) with the SEC.²⁰ We selected the period 1995 to 1999 to have a long enough time-frame to yield some insights on restatement trends, and to have one year in the sample before the Private Securities Litigation Reform Act took effect at the end of 1995.²¹ One year pre-Reform allows a limited assessment of any reduction in auditor litigation rates with the Reform Act, while keeping the restatement period recent enough to maintain a relatively consistent environment for restatements.²² For example, Dechow and Skinner (2000)

¹⁹ We deleted 48 foreign companies and 16 companies where the initial restatement disclosure was prior to January 1, 1995.

²⁰ In a small number of instances, the company filed an amended S-1. And, for companies meeting all other criteria but not filing amended Form 10-Q(s), we checked the footnote on quarterly information in the annual financial statements for disclosure of any interim restatements (approach 2b as described in the appendix) before eliminating them from the sample. The sample also includes a few companies that announced they would be restating, but went out of business prior to completing their re-filing. Information about these restatements was obtained from press releases.

²¹ In 1998, additional legislation, the Securities Litigation Uniform Standards Act of 1998, was approved making it more difficult to file securities class actions in state courts.

²² Evidence on lawsuits filed post-Reform Act, during 1996 (Grundfest and Perino 1997) and the first quarter of 1998 (Grundfest et al 1998), indicates little change in overall securities class action rates pre/post-Reform Act; the majority of securities class actions post-Reform Act involve allegations of misrepresentations in financial information; and, the post-Reform Act litigation rate for NASDAQ

argue that as stock market valuations increased (particularly from the mid-1990's) management incentives to manage earnings to maintain and improve those valuations likewise increased.

Combined, our sources identified 557 U.S. companies that announced restatements of prior results during the 1995 to 1999 time-frame. Upon further review, 141 of these were eliminated for the following reasons: the restatements involved only preliminary earnings announcements, not published financial statements (62); restatements were for subsequent events such as mergers, spin-offs, discontinued operations, and stock splits (EPS) (32); restatements were for changes in accounting principles or methods with retroactive restatements in accordance with GAAP (14); potential restatements were announced, but did not actually occur because additional investigation determined that they were not necessary (30);²³ and miscellaneous other reasons (e.g., restatements of much earlier time-periods disclosed in conjunction with SEC enforcement action settlements) (3). Thus, the final sample consists of 416 observations, 384 derived from key-word searches and 32 from other sources. Sample sources and attrition by litigation type is presented in table 1.

Insert Table 1

General Descriptive Statistics

Our analyses use the sample of 416 companies or some subset thereof. Of these companies, 259 (62 percent) have no financial reporting and disclosure litigation, 101 (24 percent) have other litigation,²⁴ and 56 (14 percent) have auditor litigation.²⁵ While some

companies exceeds that of NYSE companies. Based on litigation reported to the SEC Practice Section's Quality Control Inquiry Committee (QCIC), the number of public companies on which auditors were sued dropped after the Reform Act but returned to pre-Act levels by 1998 (although, the number of public companies likewise increased over the time-period).

²³ A number of the restatements that were eliminated for restated earnings releases or no restatement deemed necessary involved in-process research and development.

²⁴ In addition to disclosures in the sources used to select the sample, other litigation is identified from *Securities Class Action Alert*, the Stanford Law School Securities Class Action Clearinghouse, legal notices in the *Wall Street Journal*, legal cases in Lexis searching over no litigation company names, and disclosures in filings on Edgar for the sample companies.

²⁵ Along with the sources used to identify other litigation, auditor litigation is identified from sources described in Palmrose (forthcoming). Companies with auditor litigation include those with disclosures of settlements by auditors to avoid litigation.

companies with auditor and other litigation have multiple types of legal actions,²⁶ most litigation involves securities class actions by investors.²⁷ In very few instances, auditors are only sued by client companies.²⁸ Our sample of securities class actions over restatements represents about 40 percent to 50 percent of the class actions against auditors reported to the SEC Practice Section's QCIC.²⁹

Additionally, these litigation rates over restatements can be compared to rates from other litigation settings such as client fraud and bankruptcy. Both the auditor litigation rate and the combined rate for auditor and other litigation (14 and 38 percent, respectively) on restatements are lower than rates for companies with SEC enforcement actions (38 and 58 percent, respectively (Bonner et al. 1998)). However, while the auditor litigation rate on restatements (14 percent) is somewhat lower, the combined rate on restatements (38 percent) is much higher than for bankrupt companies (18 and 24 percent, respectively (Carcello and Palmrose 1994)).³⁰

²⁶ We classified two observations as auditor rather than no litigation because of a regulatory action (SEC AAER) against the auditor over audit effectiveness. However, we did not classify as auditor litigation those companies where auditors had SEC enforcement actions for independence problems unless lawsuits were likewise filed against auditors for not being independent on financials subsequently restated. For example, we classified as having auditor litigation one company who sued their predecessor audit firm over independence after the successor reaudited the financial statements which were also restated; even though, the litigation appears to be to recover costs incurred by the client company for the reaudit (including delayed financing) rather than over issues of audit effectiveness, per se, in connection with the restatement. (This is the one auditor litigation observation with only an IPR&D accounting issue.)

²⁷ We can provide limited information on the portion of securities class actions that are (1) accounting-related (irrespective of restatements) and (2) related to restatements. In mid-1999, the Stanford Law School Securities Class Action Clearinghouse reported litigation on about 650 companies of which around 55 percent had allegations over accounting problems of some sort. About 20 percent of the 650 Stanford companies are considered in our study.

²⁸ At least one no litigation company threatened to sue their auditor. However, we could find no evidence that the company did indeed sue or that the auditor settled to avoid litigation.

²⁹ This is an estimated rate. QCIC numbers are based on dates audit firms report to the QCIC, which is within 30 days of being attached as defendants. (Client names and all other information are confidential to the QCIC.) Lawsuit filing dates need not coincide with the restatement announcement dates, which are the basis of our sample time-frame. Indeed, time-lags in attaching auditors as defendants, for example after the discovery process progresses, appear to characterize the post-Reform Act environment. Furthermore, this means that litigation may yet occur, especially on more recent restatements.

³⁰ The auditor litigation rate on restatement litigation of 36 percent (56 of 157, where 157 reflects the 101 other and 56 auditor litigation restatements) is much higher than the auditor litigation rate of about 18 percent on securities class actions generally in the post-Reform Act period (from about 1996 through 1999, see Fuerman (1999)).

Panel B of table 1 shows that a slight majority of restatements involve only interim financial statements (51 percent); and, these account for about 50 percent of other litigation. Even so, the majority of interim only restatements have no litigation (72 percent, 152 of 212). The auditor litigation rate on interim only restatements is just 4 percent (9 of 212), so auditors are sued significantly less frequently on interim only restatements than expected given the frequency of auditor litigation on all restatements. The auditor litigation rate increases significantly ($p = .000$) to 23 percent (47 of 204) when considering restatements involving annual reports and ignoring interim only restatements.

In summary, these data indicate that litigation over restatements occurs with meaningful frequency. This is especially true for auditors on restatements involving annual rather than interim only financial statements. In subsequent sections, we provide some separate analyses of annual restatements.

For the overall sample and each subsample (no, other, auditor litigation), table 2 provides a breakdown of restatements by year (panel A) and industry (panel B). Panel A of table 2 shows that the number of restatements is increasing over our sample period. Indeed, the first six months of 1999 has 33 percent of the overall sample, the highest frequency of any period. This is largely attributable to a wave of IPR&D restatements (78 in the first half of 1999).³¹

Insert Table 2

With the exception of the auditor litigation subsample, trends in the overall sample mostly repeat in the subsamples. In the auditor litigation subsample, few 1999 restatements have resulted in suits against auditors. Finally, the data reveal that the auditor litigation rate did not decrease post-Reform Act as the 1996 rate is actually slightly higher (29 percent, 14 of 49) than in 1995, pre-Reform, (23 percent, 10 of 43).

Panel B of table 2 gives the sample distribution by industry. Companies in manufacturing and technology (SIC codes in the 357's and 737's) comprise the majority

³¹ In September 1998, the Chief Accountant wrote the chair of the AICPA SEC Regulations Committee about the SEC's concern over IPR&D accounting practices and suggested the need for additional guidance. In October 1998, the SEC acknowledged that it had been challenging registrants on IPR&D charges as part of purchase business combinations and suggested IPR&D as among the topics the AICPA include in a forthcoming Audit Risk Alert. In October 1998, an AICPA In-Process Research and Development Task Force made available some tentative emerging best practices in IPR&D valuation.

of our restatement sample. Frequencies by industry for the auditor, other, and no litigation subsamples are fairly similar to those for the overall sample.³²

Accounting Issues

Table 3 describes the accounting issues in our restatement sample including each subsample (no, other, auditor litigation). The table reports the types of accounting issues in each category (panel A). The issues reported in panel A are not mutually exclusive, a number of restatements involve multiple issues. Table 3, panel B, classifies each observation into one of three restatement categories—economic only, technical only, and both economic and technical issues.

As shown in table 3 (panel A), economic issues include restatements of revenues, operating expenses (e.g., bad debts, loan losses, warranty costs, and the like),³³ and various other balance sheet (income statement operating expense) accounts such as inventory (cost of goods sold), property, plant, and equipment (PP&E) (depreciation expense), and investments (gains and losses).³⁴ Technical issues include restatements of a variety of balance sheet (and their related income statement non-operating) accounts such as for intangible assets (e.g., goodwill and deferred research and development), restructurings, convertible debt and warrant interest,³⁵ IPR&D, purchase/pooling accounting, other acquisition accounting issues, and miscellaneous other accounting issues (e.g., misclassifications (other than between core and non-core earnings) and miscomputations of EPS).

³² Although some research indicates industry differences in auditor litigation (e.g., see Bonner et al. 1998) and in other litigation (e.g., see Jones and Weingram 1996) and, at various times, auditors do recognize certain industries as higher risk, because of the similarities among subsamples, we do not include industry variables in our multivariate analysis.

³³ Restatements of sales returns are included under operating expenses rather than revenues.

³⁴ Recognize that investments could have been made for operating purposes. Because of the small number of PP&E and investment restatements, we assume that they all involve restatements of amounts originally included in core earnings.

³⁵ At the March 13, 1997 meeting of the FASB's Emerging Issues Task Force, the SEC announced that on initial issue a beneficial conversion feature should be recognized and measured by allocating a portion of the proceeds equal to the intrinsic value of that feature to additional paid-in capital. Any (embedded) discount resulting from the beneficial conversion feature increases the effective interest rate of the security and should be reflected as a charge to interest expense. Based on discussions with practitioners, it was determined that the SEC considered these restatements to be error corrections, so they are included in our sample, even though registrants and their auditors may have disagreed with the SEC's position.

As shown in table 3 (panel A), revenue and expense restatements are the two most frequent types in the overall sample (34 percent and 28 percent, respectively) and in the auditor litigation (77 percent and 45 percent) and other litigation (48 percent and 30 percent) subsamples. IPR&D restatements are the most frequent type in the no litigation subsample (31 percent) followed by expense adjustments (23 percent).

In the overall sample, economic issues have the highest frequency (47 percent) (table 3, panel B); another 9 percent have both economic and technical issues; and, 44 percent have only technical issues. However, different pictures emerge within subsamples. While the majority of restatements with other litigation involve only economic issues (53 percent), the majority of no litigation restatements involve only technical issues (58 percent). Focusing on auditor litigation, and consistent with our conjecture, restatements with only economic issues represent the vast majority (79 percent). Just 2 percent of restatements with auditor litigation have only technical issues. Even so, litigation occurs over technical issues as restatements with only this type represent 32 percent of the other litigation subsample. (Univariate tests are significant and in the expected directions for economic only and technical only comparisons.) While 19 percent of the restatements with auditor litigation involve both economic and technical issues (other litigation has 15 percent and no litigation just 5 percent), we cannot determine if this reflects some version of big bath accounting on these restatements.³⁶

The next section summarizes the multivariate model we use to examine litigation against auditors over restatements. We use this model to test the significance of accounting issues (economic or technical) when considering additional variables extant research has found to be relevant in auditor litigation. (See Latham and Linville (1998) for a review of some literature on auditor litigation.)

IV. Multivariate Analyses

Multivariate Model

Our multivariate analyses use the following model to examine the circumstances of litigation against auditors on restatements:

³⁶ Although, big bath accounting could occur within categories (e.g., involve more than one economic issue) as well as between categories (i.e., involve both economic and technical issues).

auditor litigation = β_1 (test variable and control variables for other restatement, client and auditor characteristics)

The test variable in the model is an indicator variable (1 = economic restatements, 0 = otherwise), where economic includes companies restating for only economic issues as well as companies restating for both economic and technical issues,³⁷ and otherwise includes companies restating for only technical issues. Other restatement characteristics include variables for fraud, materiality, number of years restated, and interim only financial statements. Client characteristics include variables for client size, financial condition, recent IPO, sales growth, and security price changes. The only variable for auditor characteristic is type of auditor. Although we use the same model to compare restatements with auditor/no litigation and auditor/other litigation, we expect differences between these comparisons in the significance of several variables as subsequently discussed.

Other Restatement Characteristics

Fraud

Fraudulent financial reporting—the preparation and dissemination of audited financial statements with intentional material misstatements or omissions—often has been at the heart of concerns over audit effectiveness. The current environment is no exception, even though some auditors emphasize the limitations of an audit when it comes to detecting fraud, especially collusive or third-party frauds. Research has generally found fraud to be a significant variable in auditor litigation (e.g., St. Pierre and Anderson 1984, Palmrose 1987, Carcello and Palmrose 1994, Fuerman and Sawyer 1997, Fuerman 1999). Likewise, we expect fraud to play a significant role in auditor litigation in our restatement sample, regardless of the comparison subsamples. We include an indicator variable for fraudulent financial reporting (1 = yes, 0 = no).³⁸ We rely on objective evidence, rather than plaintiff allegations, to determine the presence of fraud. Objective evidence includes criminal charges against management, admission by the

³⁷ As it turns out, our results are not sensitive to inclusion/exclusion of companies with both economic and technical restatements.

³⁸ The vast majority of frauds in our sample are for fraudulent financial reporting. There appears to be only one misappropriation, an embezzlement.

company (often based on investigation by the board of directors or audit committee), and SEC enforcement actions for fraudulent financial reporting.³⁹

Materiality

Materiality, whether quantitative or qualitative, may affect the likelihood of auditor litigation, with litigation likelihood increasing in materiality. While auditing standards require materiality assessments for planning and evaluating the engagement, there is no requirement for quantifying materiality. Nonetheless, auditors often do. In 1999, the SEC issued SAB No. 99, giving guidance to auditors on materiality in evaluating whether the financial statements taken as a whole are fairly presented in accordance with GAAP. The SEC cautioned auditors that quantitative rules of thumb such as 5 percent to 10 percent of net income are not to be exclusively relied on to determine whether an item is material to the financial statements. Equally important according to the SEC, is consideration of whether, in light of the surrounding circumstances, a reasonable investor would consider the item to be important.⁴⁰ Restatements reflect this consideration.

Our primary measure of materiality is a quantitative one, the percent change in net income (loss) comparing the original and restated filing.⁴¹ But we conduct additional analyses using two other materiality measures. Because of potential measurement issues arising in companies that reported net losses and/or small original earnings, we also use the change in net income scaled by revenue. Finally, we examine a variable to capture one of the SEC's suggested qualitative considerations, namely a change from net income to net loss. We use an indicator variable (1 = yes, 0 = no) to designate whether the restatement changed reported net income to a net loss.

Number of Years Restated

³⁹ We do not distinguish among types of SEC enforcement actions (i.e., some AAER's involve administrative proceedings and cease and desist orders but are nonetheless classified as having fraudulent financial reporting for our purposes).

⁴⁰ The SEC emphasized that SAB No. 99 simply restated existing concepts of materiality in the accounting and auditing literature and from long-standing case law; it did not establish new rules on materiality. The SEC's position, however, is controversial, and not one with which we necessarily agree. Furthermore, SAB No. 99 could have resulted in changes in practice after its issuance.

⁴¹ Materiality has been a difficult variable for researchers to measure (see, Bonner et al. 1998) and so has mostly been omitted in studies of auditor litigation even when relevant given the research design.

As the restatement period lengthens, audit effectiveness is increasingly likely to be called into question. Therefore, we include a variable that measures the number of years restated (quarters are counted as $\frac{1}{4}$). Bonner et al (1998) did not find a similar variable for the number of years misstated to be significant; although, Fuerman and Sawyer (1997) and Fuerman (1999) found that auditors are more likely to be sued as securities class action periods lengthen.

Interim Financial Statements

Since our sample includes both annual and quarterly restatements, in analyses of the overall sample, we include an indicator variable for restatements of only interim financial statements (yes = 1, no = 0). As previously discussed we expect auditor litigation to be less likely for interim only restatements.

Client Characteristics

Client Size

Client size consistently has been found to be associated with financial reporting and disclosure litigation when comparing companies with and without auditor litigation (Stice 1991, Carcello and Palmrose 1994, Lys and Watts 1994, Bonner et al. 1998, Heninger 1999, Raedy 2000), although not when comparing auditor and other litigation companies (Carcello and Palmrose 1994, Bonner et al. 1998, Fuerman and Sawyer 1997, Fuerman 1999). The association in the former studies may occur because larger companies are more likely to have resources, including adequate officers' and directors' insurance, available to pay plaintiffs and their attorneys. Firm size and litigation also may be linked through estimated damages. For example, Simmons (1997) reports correlations of over 50 percent between client size (ln total assets) and estimated damages. Finally, client size may affect litigation exposure because larger clients have more disclosures (Francis et al. 1994).⁴²

We include a variable for client size (ln total assets), where total assets are from the last annual financial statement issued prior to the restatement announcement. We expect this size variable to be positive and significant in analyses of auditor and no litigation companies but not auditor and other litigation companies.

⁴² Client size variables are likewise significant in comparing companies with and without financial reporting and disclosure litigation (Francis et al. 1994, Jones and Weingram 1996).

Financial Condition

Auditors consider audit risk to be greater for companies experiencing financial difficulties and for those in weaker financial condition. Guidance to auditors emphasizes these as “litigation-sensitive environments” (AICPA 1995, p. 34). The concern is that these situations provide incentives for earnings manipulation, make errors more likely, and increase the likelihood of user losses. In assessing financial condition, the Altman-Z score is among the tools used by auditors,⁴³ and Stice (1991) found it to be negative and significant in his study of auditor litigation.⁴⁴

However, in the context of restatements, the original misstatements might obscure impending financial difficulties. Thus, Z-scores or other bankruptcy prediction models based on misstated numbers need not reveal the true audit risk. Furthermore, there is some evidence from auditor litigation on bankrupt companies that litigation is more likely when bankruptcy is a surprise (Carcello and Palmrose 1994), which would suggest a positive relationship between Z-scores and auditor litigation. Therefore, while we collect Z-scores available from Compustat (based on the last annual report preceding the restatement announcement) and analyze them in a univariate setting, we focus on another, albeit ex post, proxy for the “true” financial condition in our multivariate analyses. It is an indicator variable (1 = yes, 0 = no) for bankrupt companies, delisted companies, companies with extended halts in trading, and companies going out of business without declaring bankruptcy or being delisted. Extant research documents that auditor litigation is more likely on bankrupt companies (Bonner et al. 1998, Fuerman and Sawyer 1997, Fuerman 1999).

⁴³ Auditor litigation studies have used other bankruptcy prediction measures (Lys and Watts 1994, Raedy 2000), including the Zmijewski financial condition index (Carcello and Palmrose 1994, Heninger 1999) with mixed results. The same is true for other accounting and accrual variables related to financial condition that have been used in auditor litigation studies (in matched-pairs designs). Stice (1991) but not Lys and Watts found the ratio of accounts receivable to total assets and the ratio of inventory to total assets to be positive and significant. On the other hand, in Lys and Watts, the variable for accruals to total assets was significant, while Heninger found income-increasing discretionary accruals but not nondiscretionary accruals to be significant.

⁴⁴ Variables in the model are (1) current assets less current liabilities divided by total assets, (2) retained earnings divided by total assets, (3) earnings before interest and taxes divided by total assets, (4) market value of preferred plus common stock divided by book value of total liabilities, and (5) sales divided by total assets.

Recent IPO's

Auditors recognize that contemplated and completed initial public offerings (IPO's) represent a "litigation-sensitive environment" (AICPA 1995, p. 34).⁴⁵ It is a setting of increased audit risk extending into periods subsequent to the offering especially for companies with limited operating history. Consistent with this increased risk, a review of the earnings management literature finds some evidence of companies reporting income-increasing unexpected accruals prior to IPO's and reversals of unexpected accruals following IPO's (see, Healy and Wahlen 1999). Although, Bonner et al. (1998) and Raedy (2000) did not find a similar variable to be significant, changes in stock market conditions since 1995 may have affected the role of this variable in auditor litigation. So, we include an indicator variable for recent IPO's (yes = 1, no = 0), which we define as IPO's anytime within the three years prior to the latest restated financial statements.⁴⁶

Sales Growth

Auditors consider unusually rapid sales growth as a red flag for potential errors and irregularities in financial reporting. The rationale is that such growth can strain client internal control systems, reducing their effectiveness. Anecdotal evidence from Hall and Renner (1988) suggests that auditor litigation is more likely on rapidly growing companies, perhaps because the control systems were not designed to handle the growth. While Stice (1991), Heninger (1999), and Raedy (2000) did not find sales growth to significantly differ for their companies with and without auditor litigation, given a focus on revenue and sales growth during the period of our study, we include a variable for the percentage change in sales (measured as sales for the last year restated (or in the last annual report before quarterly only restatements) minus prior year sales and all divided by prior year sales).

Security Price Changes

⁴⁵ Although, empirical evidence for periods prior to 1995 suggests litigation rates may not be higher on IPO's and auditor litigation rates may have declined during the early 1990's (Bunsis and Drake 1995).

⁴⁶ We do not include a variable for seasoned equity offerings. Jones and Weingram (1996) found that companies with seasoned equity offerings in the year before a major stock price fall are not more likely to be sued.

Extant research examines the proposition that large stock price declines attract lawsuits against auditors (Stice 1991, Carcello and Palmrose 1994, Lys and Watts 1994, Bonner et al. 1998) and others (Francis et al. 1994, Jones and Weingram 1996). We include a variable for the percentage change in security prices over the three day trading window surrounding the first restatement disclosure date (day -1 to day +1). However, it should be recognized that this date has measurement issues, it need not contain all the information relevant to the restatement, and it may not be the triggering disclosure for litigation.

While a number of restatement announcements are clearly a surprise to the market, a number are not. Sometimes information appears to have leaked to the market over a week or more before being confirmed by a restatement disclosure from the company. And, even if the restatement per se is a surprise with little or no leakage, it is not necessarily the first bad news about a company's operations, financing, and future prospects. Indeed, some restatements occur after prolonged periods of much disappointing news. In these circumstances lawsuits can be filed (with or without auditor defendants) before the first restatement disclosure. These lawsuits are subsequently amended to incorporate restatements; and, if auditors are not yet defendants they can be added. In addition, restatement announcements can be accompanied by temporary or quite extended halts in trading of company securities. And finally, as discussed in the appendix, initial restatement disclosures may be quite preliminary and incomplete.

Recognizing these issues, along with extant research (e.g., see Kinney and McDaniel 1989), we conduct additional analyses using two other security price-related variables to control for the effects of security price changes in the context of restatements. One is the percentage change in security prices over the six months preceding the first restatement disclosure date. And the other is the percentage change in security prices over the six months following the first restatement disclosure date.⁴⁷

Auditor Characteristic

⁴⁷ Under the 1995 Reform Act, damages awarded based on the market price of a security shall not exceed the difference between the purchase or sale price paid or received, as appropriate, by the plaintiff and the mean trading price of that security during the 90-day period beginning on the date on which the information correcting the misstatement or omission, the basis for the action, is disseminated to the market. Any bounce-back in stock prices certainly would be relevant in examining litigation resolutions. We do not examine resolutions in this study because of data limitations especially for auditor resolutions.

Type of Auditor

Studies on the economics of auditing and the pricing of audit services provide evidence of the Big 5 (Big 8, Big 6) designation as a surrogate for audit quality (e.g., see literature reviews in Yardley et al. 1992 and Simunic and Stein 1996). This suggests a lower litigation rate, *ceteris paribus*, for Big 5 audit firms. Indeed, in a study of the Big 8 and only the largest non-Big 8 audit firms, Palmrose (1988) reported a lower litigation rate for Big 8 auditors. Even so, because Big 5 firms have greater resources, they may represent more attractive litigation targets than other audit firms, especially much smaller ones.

These two opposing possibilities may explain why auditor litigation research on clients with all sizes of audit firms has yielded mixed results for the Big 5 (Big 8, Big 6) variable. For example, Bonner et al. (1998) found it to be positive and significant in some analyses of auditor and no litigation companies, Fuerman and Sawyer (1997), Fuerman (1999), and Raedy (2000) found it to be negative and significant, and Stice (1991) and Heninger (1999) found it not to be significant. Nonetheless, we include an indicator variable for Big 5 (Big 6) audit firms (1 = yes, 0 = no).

In summary, to examine the circumstances of auditor litigation on restatements, in addition to our test variable for economic versus technical restatements, our multivariate analyses include the following variables: fraud, materiality, number of years restated, interim only financial statements, client size, financial condition, recent IPO, sales growth, security price change, and type of auditor.

Descriptive Statistics for Multivariate Variables

Table 4 presents descriptive statistics for the variables in our multivariate model, including means, standard deviations, and medians for the continuous variables and frequencies for the discrete variables. The data are presented for the overall sample and for the auditor, other, and no litigation subsamples. Data for some observations are not available. Reduced sample sizes, where applicable, are noted parenthetically in the table. The table gives results of univariate significance tests for differences across all subsamples and between the auditor versus no and auditor versus other litigation subsamples. Table 5 provides correlation coefficients for the variables in the multivariate model and notes the significance level and sample size for each.

Insert Table 4

Insert Table 5

As shown in table 4, fraudulent financial reporting is more frequent in the auditor litigation subsample (57 percent) and restatements of interim only financials are less frequent (16 percent). All the materiality measures are greater for the auditor litigation subsample, whether based on the frequency of change from net income to loss (32 percent) or the percent change in net income/loss (mean -439 percent, median -63 percent) or the change in net income/loss as a percent of revenue (mean -41 percent, median -8 percent). Finally, the mean (median) number of years restated is also greatest for the auditor litigation subsample (2.13 (1.75) years). (For all these variables, univariate tests of differences across and between subsamples are significant at the .10 level or less, as shown in table 4.)

Comparisons of client characteristics among subsamples present a more mixed picture (table 4). Unlike other settings, clients with auditor litigation are not larger, on average, than those with no litigation (and medians are 70.8 million and 75.5 million, respectively). Mean and median Altman-Z scores do not reveal any concern over financial condition for any subsample, nor do means significantly differ among them.⁴⁸ However, our ex-post measure of financial condition finds the auditor litigation subsample with the highest frequency of bankrupt/delisted companies (45 percent). Together these results suggest that accounting misstatements may have helped mask financial difficulties on some restating companies. The auditor litigation subsample also has the highest frequency of recent IPO's (64 percent). (Frequencies significantly differ for both bankruptcy and IPO's across and between subsamples, at the .05 level or less, as shown in table 4.) Finally, while median sales growth is highest for the auditor litigation subsample (51 percent), mean sales growth does not significantly differ among subsamples.

In table 4, mean and median security price reactions to restatement announcements are negative for all subsamples but more so for the auditor litigation subsample (mean -28 and median -25 percent). For restatement companies with other

⁴⁸ Means and medians for all subsamples are above the 2.99 cutoff for classification as "non-bankrupt." However, the Altman-Z scoring model we used was developed on data from times long ago.

and auditor litigation, mean and median security price changes for both the six months preceding and the six months following the restatement disclosure date likewise are negative. (For example, for the auditor litigation subsample, the mean price change over the six months before the restatement announcement is –19 percent;⁴⁹ it is –18 percent over the six months after.) However, both of these means are positive for the no litigation subsample (13 percent over the six months preceding and 4 percent over the six months after). (Means for all three security price measures significantly differ in comparisons of auditor and no litigation but not auditor and other litigation, where only restatement announcement reactions significantly differ, in table 4.) Finally, about 85 percent more or less of the overall sample and each subsample have Big 5 auditors.

Simple correlation coefficients are shown in table 5. They reveal that economic restatements are significantly correlated with more severe circumstances as measured by the variables for fraud, materiality, number of years restated, bankrupt/delisted, and security price changes. Our multivariate model controls for these variables.

Multivariate Results

Table 6 presents the multivariate regression results. The table reports results for regressions comparing restatement companies with and without litigation (panel A), auditor versus no litigation (panel B), and auditor versus other litigation (panel C). (All regressions are statistically significant.) All regressions use reduced samples because of data restrictions mostly on the materiality and security price variables. Two sets of results are presented in each panel, one for all and another for annual restatements. The latter excludes restatements of interim only financials (perhaps reviewed but not audited), where auditor litigation is much less likely. The comparison of restatement companies with and without litigation in panel A is included to provide a more complete picture of significant factors in financial reporting litigation generally.

Insert Table 6

⁴⁹ Altman-Z scores were computed based on the last annual reporting period preceding the restatement announcement. It is difficult to say how these align, on average, with the six months preceding restatement disclosures. But, in a number of instances, especially some with auditor litigation, this evidence does reflect bad news after the issuance of misstated financial statements (used to compute Z-scores) but before restatement disclosures, consistent with the inference that misstated financial statements masked financial difficulties.

The test variable is significant in all regressions (at less than the .05 level). Accounting issues matter in litigation generally and auditor litigation specifically. Auditor litigation is more likely on economic as opposed to technical restatements, whether comparing restatements with auditor/no litigation or auditor/other litigation, and whether considering all restatements or excluding those with interim only restatements.

We further explored this result by replacing the test variable with individual indicator variables for each of the three most frequent types of restatements: revenue, operating expense, and IPR&D adjustments. Recall, revenue and operating expense adjustments are economic restatements and IPR&D adjustments are technical. Regression results (not shown) found only the revenue variable to be significant. It was positive and significant in all six regressions.

Focusing on the control variables, in the auditor/no litigation regressions (panel B), auditor litigation is significantly more likely with fraud, a recent IPO, and larger security price drops at restatement announcements, as well as on companies with higher sales growth; although, the latter is significant in regressions with all but not just annual restatements. (Variables significant in univariate but not any of these multivariate analyses (at the .10 level or less) are interim only restatements, materiality, number of years restated, and bankruptcy.)

In the auditor/other litigation regressions (panel C), the significant control variables are materiality (percent change in net income), interim only financial statements, and recent IPO. Although, materiality is not significant in the regression with just annual restatements and, of course, the interim only variable is excluded from this regression. All significant variables are in the predicted direction. (Variables significant in univariate but not any of these multivariate analyses (at the .10 level or less) are fraud, number of years restated, and bankruptcy.)

In addition to the results presented in table 6, we ran regressions for additional specifications of the model as previously discussed (results not shown). First, we substituted, in turn, each of the two other materiality variables. Neither is significant in any regression. Second, we substituted, in turn, the two other security price change variables, one for six months prior to the restatement announcement and the other for six months after the announcement. For auditor/no litigation, the price change variable for

the six months prior to the restatement announcement is significant (and the coefficient is negative). For auditor/other litigation, no price change variable is significant. The test variable remains significant in all regressions.

Finally, we added a variable to capture any interaction effect between the type of restatement (economic or technical) and security price changes. The inclusion of this interaction variable recognizes that the security price reaction may differ with the type of restatement. For example, by their very nature, economic restatements may have a greater impact on security prices. However, neither the interaction variable nor the security price change variable is significant in any regression (results not shown). The test variable remains significant in all regressions.

To summarize, restatements due to economic issues are consistently associated with auditor litigation, whether compared to no litigation or other litigation restatements, and whether considering all restatements or only those with restatements of annual financials. Some control variables appear to play different roles in different settings. For example, large price drops increase the likelihood of litigation, but they do not seem to have much affect on whether the auditor is included as a defendant.

Distinctions also occur between the results for annual restatements and those for all restatements. The sales growth and materiality variables only appear significant when considering all restatements (although they are not consistent across comparison subsamples). For example, materiality is significant in the auditor/other litigation comparison for all restatements but not for annual restatements (i.e., excluding interim only restatements). The significant result using all restatements may be driven by some large quarterly misstatements. While auditor litigation over interim only restatements seldom occurs, particularly large quarterly misstatements are more likely to involve the auditor in litigation.

Summary and Concluding Remarks

This study examined the circumstances of auditor litigation on restatements announced from 1995 through June 30, 1999. In our sample of 416 restatements, about half (51 percent) consisted of interim only restatements and the others (49 percent) involved restatements of annual financial statements along with interims. For all restatements, the auditor litigation rate was 14 percent. The auditor litigation rate rose to

23 percent for annual restatements. Auditors were infrequently sued on interim only restatements (the auditor litigation rate was 4 percent on these).

In examining the circumstances of auditor litigation, we focused on the accounting issues that gave rise to the restatements. We classified these issues into two categories—economic and technical. We expected that auditors were more likely to be sued on economic restatements. Economic restatements involved transactions and accounts related to core (recurring) earnings. All other restatements were technical. The most common type of economic restatement involved revenue adjustments. The most common type of technical restatement was for IPR&D.

We used a multivariate model to test the effect of economic versus technical restatements on auditor litigation. We found that auditors were significantly more likely to be sued over economic restatements than technical ones, whether auditor/no or auditor/other litigation comparisons and whether considering all restatements or just those with annual restatements. Additional analyses found that revenue restatements, the most frequent type of restatement overall, primarily contributed to this result. Finally, economic restatements were associated with more severe restatement and client conditions as measured by fraud, materiality, bankruptcy/delisting, and security price reaction. However, our multivariate model included these as control variables.

Our results have several implications for issues of audit effectiveness, whether perceived or actual, and auditor litigation on restatements. First, IPR&D accounting generally and IPR&D restatements specifically have been a focus of concerns, especially by the SEC; uncertainty about GAAP and the SEC position on GAAP may have contributed to the need for IPR&D restatements. But, concerns likewise encompassed potential independence problems and attendant potential compromises in audit effectiveness in situations where the same firm provided both IPR&D valuation-related and audit services. We understand that by late 1998 firms ceased providing IPR&D valuation services to their audit clients. Moreover, such valuation services are among those that would be proscribed under the SEC's proposed rule on auditor independence issued in June 2000. Even so, some IPR&D restatements in our sample likely involved these situations. We cannot determine which ones but we can say that at most 2 percent (2 of 97) had auditor litigation and up to 17 percent (16 of 97) had other litigation, under

the unlikely assumption all IPR&D restatements with litigation involved joint services. However, we could find no indication that the two observations with auditor litigation involved joint services. Thus, it appears that questions related to audit effectiveness and a lack of independence because of the joint supply of audit and IPR&D valuation services were not issues in auditor litigation for our restatement sample.

Furthermore, we can comment on restatement frequencies for two other accounting issues that have been the focus of public policy concerns over the quality of financial reporting and audit effectiveness. Restructuring restatements were infrequent and cookie jar reserves (overstated expenses) were too rare in our sample to analyze. To the extent that accounting and auditing problems exist over these issues,⁵⁰ including because of some uncertainties in GAAP, they have not tended to result in restatements.

Second, the risk-based methodologies used by firms auditing most public companies emphasize higher risk accounts and balances. Yet, misstatements in high risk accounts and transactions (albeit ex post) were not adequately identified, addressed, or resolved using these methodologies, at least in annual financial statements. While this applies to both economic and technical restatements, our results suggest that economic restatements are the ones most likely to prove costly for auditors in terms of litigation.

Moreover, the significance of a subset of economic restatements, revenue adjustments, whether for erroneous sales prices and quantities or for premature or fictitious sales transactions, are a particular concern. Since our sample was from a period when audit risk alerts periodically emphasized revenue recognition issues, our results are consistent with the need for auditors to consider what additional guidance or procedures

⁵⁰ See Nelson et al. (in process) and Panel on Audit Effectiveness (2000). Nelson et al. examine the frequency with which earnings management (EM) is attempted by managers and waived by auditors in various accounts. Compared with the results of analyses of SEC AAER's, they found that EMs involving revenue recognition are relatively less frequent (and among the least often waived by auditors), while EMs involving reserves are relatively more frequent (and among the most often waived by auditors). They also found that auditors are more likely to waive current-income-decreasing EMs than current-income-increasing. This suggests that auditors are active in thwarting income-increasing EM, but also suggests that they may tend to allow clients to build cookie-jar reserves.

might be helpful for improving audit effectiveness in this area, as the Panel on Audit Effectiveness Report (2000) recommends and the Auditing Standards Board is doing.⁵¹

Third, the role of fraudulent financial reporting in auditor litigation over restatements should not be neglected. While fraud was not a significant variable in multivariate analyses of auditor versus other litigation, it was in auditor versus no litigation. More than half (57 percent) of the restatements with auditor litigation involved fraudulent financial reporting.

Finally, while the auditor litigation rate was low, the likelihood of auditor litigation on interim restatements may be altered by recent events. It has long been debated whether timely reviews should be mandatory to improve the quality of both interim and annual financial reporting (Ettredge et al. 1994 and 2000). In late 1999, the SEC adopted requirements that companies have their independent auditors review the quarterly reports prior to filing them with the SEC,⁵² beginning with filings on or after March 15, 2000 (MacDonald 1999, Deloitte & Touche 2000)⁵³ Our evidence on interim restatements should facilitate future assessments of the impact of these policy changes on both restatements and auditor litigation.

⁵¹ In addition, in January 1999, the AICPA published *Audit Issues in Revenue Recognition*, which brought together in one source the audit and accounting guidance on revenue recognition for sales of goods and services in the ordinary course of business.

⁵² The new SEC requirements were preceded by The Blue Ribbon Panel on Audit Committee recommendations, in early 1999, for timely reviews and an agreement by the Big 5 (along with some non-Big 5 firms) that they would perform financial statement audits only for public companies that allowed reviews of their financial statements every quarter (*Journal of Accountancy*, 1999). The Big 5 announcement just formalized extant practice on a number of public clients over the last five years.

⁵³ Required reviews generally involve public entities as defined in SAS No. 71 except for foreign registrants, investment companies that report under the Investment Company Act of 1940, and smaller entities not required to include quarterly information in Form 10-K in accordance with Rule 302(a)(1) of Regulation S-K. Regarding the latter, certain companies are required by Item 302(a) to include selected quarterly financial data in their annual reports or other documents filed with the SEC that contain audited financial statements. Mostly the criteria are size-related for determining whether a U.S. company must make the footnote disclosure. However, in late 1999 the SEC also extended the Item 302(a) requirements to all companies regardless of size or public float, except small business issuers filing on small business forms, that have securities registered under section 12(b) or 12(g) of the Securities Exchange Act of 1934 (Deloitte & Touche 2000).

Appendix

Disclosure Requirements and Auditor Responsibilities for Restatements

In restating their financial statements, companies are complying with various requirements under the Securities Acts to correct inaccurate, incomplete, or misleading disclosures. As Skinner (1997) explains, “there is a duty to correct statements made in any filing ... if the statements either have become inaccurate by virtue of subsequent events, or are later discovered to have been false and misleading from the outset, and the issuer knows or should know that persons are continuing to rely on all or any material portion of the statements” (Sec. Act Rel. 6084, 17 SEC Dock. 1048, 1054 (1979)). A number of SEC enforcement actions reinforce that the duty to correct likewise applies to quarterly statements not in accordance with GAAP (Kigin 1998).

There is much fluidity in disclosures surrounding restatements. The nature, extent, and timing of these disclosures depend on the circumstances. Certainly, the first restatement-related disclosure can be delayed until necessary information has been “sufficiently verified to permit officers and directors to have full confidence in its accuracy” (Skinner, 1997, p. 253). In practice, the initial disclosure for some companies is a press release stating that they may (will) need to restate previously issued financial statements even though few details and no amounts are yet available.⁵⁴ Subsequent disclosures can update this information and may include revised financial statement amounts. On the other hand, for some companies, the first disclosure of a restatement occurs with (and perhaps only in) the amended SEC filing (i.e., amended Form 10-K and/or Form 10-Q).⁵⁵

A subset of companies file 8-K’s with the SEC that disclose initial and/or subsequent information on restatements. These 8-K’s are filed at the option of

⁵⁴ This might occur, for example, when the effect on the financial statements of subsequently discovered information cannot be determined without a prolonged investigation and so the issuance of revised financial statements would necessarily be delayed (SAS No. 1, AU sec. 561.06).

⁵⁵ This might occur, for example, when the effect on the financial statements of subsequently discovered information can promptly be determined (SAS No. 1, AU sec. 561.06).

registrants. They contain information not otherwise required to be reported in an 8-K but deemed by registrants of importance to security holders.⁵⁶ As a practical matter, a number of these 8-K's simply duplicate restatement information disclosed in a press release. Finally, required 8-K filings reporting an auditor change (dismissal, resignation, or refusal to stand for re-election) can contain restatement-related disclosures, especially where the auditor has withdrawn one or more previously issued report(s) and/or has had disagreements with the client.

Auditor responsibilities related to restatements are prescribed by GAAS. GAAS provides guidance when, subsequent to the date of the audit or review report, the auditor becomes aware of facts indicating that previously issued financial statements contain material omissions or misstatements.⁵⁷ After determining that the information is reliable, that it existed at the date of the auditor's report, that it would have affected the report if it had been known and not reflected in the financial statements, and that people currently are relying or likely to rely on the financial statements and would attach importance to the information, the auditor needs to advise the client to make appropriate disclosures; and, the auditor should take whatever steps are necessary to be satisfied that the client has indeed made the disclosures. If the client refuses to make the disclosures, the auditor not only should notify the board of directors but, according to GAAS, may need to notify regulatory agencies having jurisdiction over the client and perhaps other outside parties known to be relying on the financial statements and audit report.

Under the Fraud Detection and Disclosure section of the 1995 Reform Act, auditors have additional responsibilities where information indicates that the financial statements may have been affected by a material illegal act (fraud).⁵⁸ In these circumstances, the auditor must determine if senior management has taken appropriate remedial action. If not, and the auditor reasonably expects the lack thereof to cause a

⁵⁶ In addition to other events (Item 5), SEC Form 8-K must be filed upon changes in control, acquisition or disposition of assets, bankruptcy or receivership, changes in independent auditors, and resignation of directors.

⁵⁷ See, SAS No. 1, "Subsequent Discovery of Facts Existing at the Date of the Auditor's Report" (AU sec. 561) and SAS No. 71, *Interim Financial Information*.

⁵⁸ Illegal acts are broadly defined to include an act or omission that violates any law or any rule or regulation having the force of law.

departure from a standard audit report or the auditor's resignation, the auditor must report these conclusions to the board of directors. In turn, the board is required, within one business day, to inform the SEC. And, if the board fails to do so, the auditor must, by the next business day, furnish the SEC with a copy of the auditor's report to the board.⁵⁹

Finally, aside from the various disclosure requirements, additional considerations arise for restatements involving only the first, second, and/or third quarters (i.e., no annual statements) that come to light in the fourth quarter before the conclusion of the annual audit. As a practical matter companies can make these quarterly restatements by either of two different approaches: (1) they can file amended Form 10-Q's before the conclusion of the annual audit or (2) they can disclose the restatements in the quarterly footnote of the annual statements. In turn, the second approach has two more choices: (2a) later (i.e., after the conclusion of the annual audit) the company can file amended Form 10-Q's and make no mention of any restatements in the subsequent year Form 10-Q's; or, (2b) the company can choose not to file amended Form 10-Q's but instead mention the restatements in the subsequent year Form 10-Q's. Regardless of the approach, footnotes with quarterly information in annual financial statements reflect restated quarterly numbers as do subsequent year comparative interim statements.⁶⁰ And, apparently most companies file amended Form 10-Q's, albeit these Forms may be filed either before or after the conclusion of annual audits.

⁵⁹ To encourage compliance, the Reform Act has a safe harbor provision for auditors. It states that no independent accountant shall be liable in a private action for any finding, conclusion, or statement expressed in a report to a company's board or the SEC.

⁶⁰ Although, we did find one exception where the comparative interim statements did not reflect restated quarterly numbers, instead readers were referred to a footnote in the prior year annual financial statements.

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TABLE 1
Sample Sources and Attrition

<i>Panel A: Sources and Attrition</i>	<i>No</i> <u><i>Litigation</i></u>	<i>Other</i> <u><i>Litigation</i></u>	<i>Auditor</i> <u><i>Litigation</i></u>	<u><i>All</i></u>
Sample sources:				
Key-word searches	330	109	60	499
Other sources	<u>50</u>	<u>8</u>	<u>0</u>	<u>58</u>
Initial sample	380	117	60	557
Reasons for deletions:				
Earnings release revised	52	9	1	62
Subsequent events	29	3		32
Change in principle or estimate	11		3	14
No restatement necessary	26	4		30
Other	<u>3</u>			<u>3</u>
Number deleted	<u>121</u>	<u>16</u>	<u>4</u>	<u>141</u>
Final sample	<u>259</u> (62%)	<u>101</u> (24%)	<u>56</u> (14%)	<u>416</u> (100%)

Panel B: Financial Statements Restated.¹

Annual	107	41%	50	50%	47	84%	204	49%
Interim only	<u>152</u>	<u>59%</u>	<u>51</u>	<u>50%</u>	<u>9</u>	<u>16%</u>	<u>212</u>	<u>51%</u>
	<u>259</u>	<u>100%</u>	<u>101</u>	<u>100%</u>	<u>56</u>	<u>100%</u>	<u>416</u>	<u>100%</u>

¹ Difference across groups is significant. Chi-squared 33.47, p-value .000.

TABLE 2
Description of Sample by Year and Industry

	<i>No</i> <i>Litigation</i>		<i>Other</i> <i>Litigation</i>		<i>Auditor</i> <i>Litigation</i>		<i>All</i>	<i>Chi-squ.</i>	<i>p</i>
Sample Size	259	(62%)	101	(24%)	56	(14%)	416 (100%)		
<i>Panel A: Restatement Year</i>									
1995	23	(9%)	10	(10%)	10	(18%)	43 (10%)	28.43	.000
1996	29	(11%)	6	(6%)	14	(25%)	49 (12%)		
1997	55	(21%)	20	(20%)	12	(21%)	87 (21%)		
1998	56	(22%)	30	(30%)	15	(27%)	101 (24%)		
1999	96	(37%)	35	(34%)	5	(9%)	136 (33%)		
Total	259	(100%)	101	(100%)	56	(100%)	416 (100%)		
<i>Panel B: Industry Distribution</i>									
Agriculture, Mining and Construction.	7	(3%)	1	(1%)	1	(2%)	9 (2%)	12.26	.726
Manufacturing	83	(32%)	30	(30%)	17	(30%)	130 (31%)		
Technology	69	(27%)	34	(34%)	14	(25%)	117 (28%)		
Transportation	4	(2%)	2	(2%)	0	(0%)	6 (1%)		
Communication	8	(3%)	2	(2%)	2	(4%)	12 (3%)		
Utilities	3	(1%)	3	(3%)	1	(2%)	7 (2%)		
Wholesale and Retail	26	(10%)	7	(7%)	9	(15%)	42 (10%)		
Financial Services	33	(13%)	7	(7%)	6	(11%)	46 (11%)		
Services	26	(9%)	15	(14%)	6	(11%)	47 (12%)		
Total	259	(100%)	101	(100%)	56	(100%)	416 (100%)		

TABLE 3
Description of Accounting Issues

	<i>No Litigation</i> (n = 259)	<i>Other Litigation</i> (n = 101)	<i>Auditor Litigation</i> (n = 56)	<i>Total Sample</i> (n = 416)	<i>Chi-squ.</i>	<i>p</i>
<i>Panel A: Reasons for All Restatements</i>						
<u><i>Economic Issues:</i></u>						
Revenue recognition	50 (19%)	48 (48%)	43 (77%)	141 (34%)	78.96	.000 ^a
Operating expense adjustments	60 (23%)	30 (30%)	25 (45%)	115 (28%)	10.90	.004
Inventory (CGS) adjustments	9 (3%)	8 (8%)	8 (14%)	25 (6%)	10.39	.006
PP&E (depreciation expense) and investment (gains & losses) adjustments	9 (3%)	4 (4%)	3 (5%)	16 (4%)	0.00	.000
<u><i>Technical Issues:</i></u>						
Adjustments to intangible assets	14 (5%)	13 (13%)	8 (14%)	35 (8%)	8.15	.017
Restructuring charges	12 (5%)	2 (2%)	2 (4%)	16 (4%)	1.40	.498
Convertible debt/warrant interest	17 (7%)	1 (1%)	0 (0%)	18 (4%)	8.38	.015
In-process R&D adjustments	79 (31%)	16 (16%)	2 (4%)	97 (23%)	22.85	.000
Pooling / purchase accounting	7 (3%)	8 (8%)	1 (2%)	16 (4%)	6.09	.048
Other acquisition issues	22 (8%)	14 (14%)	7 (13%)	43 (10%)	2.59	.275
Other technical issues	28 (11%)	5 (5%)	0 (0%)	33 (8%)	8.99	.011
<i>Panel B: Classification of All Restatements</i>						
Economic issues only	97 (37%)	54 (53%)	44 (79%)	195 (47%)	33.59	.000 ^a
					31.49	.000 ^b
					9.68	.002 ^c
Technical issues only	150 (58%)	32 (32%)	1 (2%)	183 (44%)	67.08	.000
					58.12	.000
					19.40	.000
Economic and technical issues	12 (5%)	15 (15%)	11 (19%)	38 (9%)	17.75	.000
					15.33	.000
					0.60	.439

^a Significance level across all three groups

^b Significance level between auditor litigation and no litigation

^c Significance level between auditor litigation and other litigation

TABLE 4
Descriptive Statistics for Other Restatement, Client and Auditor Variables

		<i>No Litigation</i> (n = 259)	<i>Other Litigation</i> (n = 101)	<i>Auditor Litigation</i> (n = 56)	<i>All</i> (n = 416)	<i>F-statistic Chi-squ.</i>	<i>p</i>
<u>Restatement Characteristics:</u>							
Only interim periods restated	<i>frequency</i>	152 (59%)	51 (50%)	9 (16%)	212 (51%)	33.47	.000 ^a
						33.47	.000 ^b
						18.08	.000 ^c
Fraud	<i>frequency</i>	16 (6%)	27 (27%)	32 (57%)	75 (18%)	87.77	.000
						92.60	.000
						14.20	.000
Materiality measures							
Change from net income to loss	<i>frequency</i>	29 (11%)	17 (17%)	18 (32%)	64 (15%)	15.73	.000
						15.91	.000
						4.88	.027
Percent change in net income (loss) (n = 255, 99, 52, 406)	<i>mean</i>	-74%	-59%	-439%	-117%	7.42	.001
	<i>std. dev.</i>	5.29	1.40	13.68	6.56	10.55	.001
	<i>median</i>	-13%	-29%	-63%	-23%	7.53	.007
Change in net income (loss) as a percent of revenue (n = 250, 98, 52, 400)	<i>mean</i>	10%	-14%	-41%	-3%	3.00	.051
	<i>std. dev.</i>	1.72	0.83	0.92	1.47	4.25	.040
	<i>median</i>	0%	-2%	-8%	-1%	3.19	.076
Number of years restated	<i>mean</i>	1.03	1.34	2.13	1.26	27.44	.000
	<i>std. dev.</i>	0.94	1.02	1.25	1.07	54.35	.000
	<i>median</i>	0.75	1.00	1.75	0.75	17.84	.000
<u>Client Characteristics:</u>							
Client assets (n = 258, 101, 56, 415)	<i>mean</i>	1,097.9	517.7	779.5	913.8	0.98	.377
	<i>std. dev.</i>	4,411.8	1,044.5	2,241.3	3,616.0	0.28	.600
	<i>median</i>	75.5	138.1	70.8	83.7	0.99	.321
Financial condition							
Altman Z-score (n = 186, 76, 46, 308)	<i>mean</i>	4.42	5.96	5.27	4.93	1.07	.343
	<i>std. dev.</i>	7.77	8.40	7.60	7.91	0.45	.505
	<i>median</i>	3.35	3.68	3.67	3.48	0.21	.651
Bankrupt or delisted	<i>frequency</i>	19 (7%)	17 (17%)	25 (45%)	61 (15%)	51.71	.000
						53.33	.000
						14.22	.000

^a Significance level across all three groups

^b Significance level between auditor litigation and no litigation

^c Significance level between auditor litigation and other litigation

TABLE 4 (CONTINUED)
Descriptive Statistics for Other Restatement, Client and Auditor Variables

		<u>No</u> <u>Litigation</u> (n = 259)	<u>Other</u> <u>Litigation</u> (n = 101)	<u>Auditor</u> <u>Litigation</u> (n = 56)	<u>All</u> (n = 416)	<u>F-statistic</u> <u>Chi-squ.</u>	<u>p</u>
Recent IPO	<i>frequency</i>	95 (37%)	48 (48%)	36 (64%)	179 (43%)	15.41	.000
						14.45	.000
						4.07	.044
Sales growth (n = 251 , 99 , 55 , 405)	<i>mean</i>	88%	354%	218%	170%	1.18	.308
	<i>std. dev.</i>	3.88	28.25	10.61	14.81	2.37	.125
	<i>median</i>	22%	40%	51%	29%	0.12	.732
Security price changes Surrounding disclosure date (day -1 to day +1) (n = 228 , 101 , 51 , 380)	<i>mean</i>	-4%	-20%	-28%	-11%	56.33	.000
	<i>std. dev.</i>	0.12	0.20	0.28	0.20	95.03	.000
	<i>Median</i>	-2%	-16%	-25%	-6%	5.07	.026
Over six months preceding disclosure date (n = 230 , 101 , 53 , 384)	<i>mean</i>	13%	-21%	-19%	0%	5.81	.003
	<i>std. dev.</i>	1.17	0.34	0.50	0.95	3.93	.049
	<i>median</i>	-7%	-24%	-30%	-16%	0.04	.847
Over six months following disclosure date (n = 228 , 100 , 50 , 378)	<i>mean</i>	4%	-10%	-18%	-2%	4.84	.008
	<i>std. dev.</i>	0.56	0.43	0.63	0.54	6.40	.012
	<i>median</i>	-5%	-15%	-31%	-9%	0.99	.322
<u>Auditor Characteristic:</u>							
Big 5 auditor (n = 251 , 101 , 56 , 408)	<i>frequency</i>	208 (83%)	90 (89%)	48 (86%)	346 (85%)	2.22	.330
						0.27	.605
						0.39	.532

^a Significance level across all three groups

^b Significance level between auditor litigation and no litigation

^c Significance level between auditor litigation and other litigation

TABLE 5
Correlation Coefficients

	<u>Fraud</u>	<u>Net Income Change</u>	<u>Years Restated</u>	<u>Total Assets (ln)</u>	<u>Bankrupt/ Delisted</u>	<u>Recent IPO</u>	<u>Sales Growth</u>	<u>Price Change</u>	<u>Big 5 Auditor</u>	<u>Interim Financials</u>
Economic Restatement	0.35 (.00)	-0.20 (.00)	0.11 (.03)	-0.17 (.00)	0.23 (.00)	0.04 (.46)	0.05 (.31)	-0.35 (.00)	-0.11 (.02)	-0.15 ^a (.00) ^b
Fraud	416	-0.18 (.00) 406	.20 (.00) 416	-0.04 (.47) 414	.37 (.00) 416	.07 (.14) 416	-0.03 (.50) 405	-0.37 (.00) 380	-0.05 (.33) 408	-0.15 ^c (.00) 416
Net Income Change			.03 (.56) 406	.08 (.12) 404	-0.18 (.00) 406	-0.04 (.46) 406	.00 (.99) 395	.20 (.00) 371	.06 (.21) 398	-0.04 (.48) 406
Years Restated				.23 (.00) 414	.09 (.08) 416	.00 (.99) 416	-0.05 (.29) 405	-0.24 (.00) 380	.08 (.11) 408	-0.75 (.00) 416
Total Assets (ln)					-0.11 (.02) 414	-0.17 (.00) 414	-0.07 (.16) 404	.09 (.07) 379	.32 (.00) 407	-0.12 (.02) 414
Bankrupt/ Delisted						.10 (.04) 416	-0.01 (.88) 405	-0.32 (.00) 380	-0.05 (.32) 408	-0.14 (.00) 416
Recent IPO							-0.03 (.59) 405	-0.13 (.01) 380	-0.02 (.62) 408	-0.03 (.52) 416
Sales Growth								-0.04 (.42) 371	-0.11 (.02) 398	.08 (.13) 405
Price Change									-0.02 (.72) 373	.13 (.01) 380
Big 5 Auditor										-0.06 (.23) 408

^a Pearson correlation coefficient

^b Significance (2-tailed)

^c n

TABLE 6
Logistic Regression Results

Panel A: Dependent Variable is Litigation (1) vs. No Litigation (0)

<u>Independent Variable:</u>	<u>Predicted Relationship</u>	<u>All Restatements (n = 355)</u>		<u>Annual Restatements (n = 171)</u>	
		<u>Estimated Coefficients</u>	<u>p-value</u>	<u>Estimated Coefficients</u>	<u>p-value</u>
Interim only financial statements	-	0.11	.805		
Economic restatement	+	1.04	.001 *	1.40	.002 *
Fraud or irregularities	+	1.80	.000 *	1.78	.007 *
Percent change in net income	-	0.03	.130	0.16	.063 *
Number of years restated	+	0.46	.046 *	0.39	.116
Client assets (ln)	+	0.19	.027 *	0.08	.458
Bankrupt or delisted	+	0.31	.527	-0.15	.822
Recent IPO	+	0.69	.018 *	0.77	.074 *
Sales growth	+	0.03	.199	0.20	.193
Security price change	-	-4.98	.000 *	-5.31	.001 *
Type of auditor (Big 5)	+/-	0.23	.609	1.04	.174
Intercept		-3.90	.000 *	-4.22	.000 *
<u>Model Summary Statistics</u>					
-2 log likelihood			325.951		155.766
Model Chi-square		(df = 11)	153.462	(df = 10)	81.004
P-value			.000		.000
Percent correctly classified			76.9%		73.7%

*Significant at the .10 level or less (two-tailed).

TABLE 6
Logistic Regression Results

Panel B: Dependent Variable is Auditor Litigation (1) vs. No Litigation (0)

<u>Independent Variable:</u>	<u>Predicted Relationship</u>	<u>All Restatements (n = 258)</u>		<u>Annual Restatements (n = 122)</u>	
		<u>Estimated Coefficients</u>	<u>p-value</u>	<u>Estimated Coefficients</u>	<u>p-value</u>
Interim only financial statements	-	-1.29	.117		
Economic restatement	+	3.08	.005 *	2.95	.011 *
Fraud or irregularities	+	2.59	.000 *	1.99	.009 *
Percent change in net income	-	0.00	.920	0.04	.598
Number of years restated	+	0.46	.138	0.46	.146
Client assets (ln)	+	0.15	.373	0.06	.744
Bankrupt or delisted	+	0.50	.518	0.32	.708
Recent IPO	+	1.27	.032 *	1.18	.078 *
Sales growth	+	0.06	.013 *	0.16	.549
Security price change	-	-3.06	.043 *	-3.76	.037 *
Type of auditor (Big 5)	+/-	0.44	.591	0.59	.521
Intercept		-7.11	.000 *	-6.56	.000 *
<u>Model Summary Statistics</u>					
-2 log likelihood			98.927		74.997
Model Chi-square		(df = 11)	146.003	(df = 10)	79.372
P-value			.000		.000
Percent correctly classified			91.9%		84.4%

*Significant at the .10 level or less (two-tailed).

TABLE 6
Logistic Regression Results

Panel C: Dependent Variable is Auditor Litigation (1) vs. Other Litigation (0)

<u>Independent Variable:</u>	<u>Predicted Relationship</u>	<u>All Restatements (n = 144)</u>		<u>Annual Restatements (n = 89)</u>	
		<u>Estimated Coefficients</u>	<u>p-value</u>	<u>Estimated Coefficients</u>	<u>p-value</u>
Interim only financial statements	-	-1.52	.051 *		
Economic restatement	+	2.65	.019 *	2.85	.026 *
Fraud or irregularities	+	0.69	.156	0.59	.292
Percent change in net income	-	-0.30	.057 *	-0.22	.308
Number of years restated	+	0.37	.147	0.40	.141
Client assets (ln)	+	0.10	.546	0.17	.342
Bankrupt or delisted	+	0.54	.364	0.22	.741
Recent IPO	+	1.02	.055 *	1.30	.034 *
Sales growth	+	0.01	.455	0.28	.229
Security price change	-	0.76	.462	-0.27	.813
Type of auditor (Big 5)	+/-	-0.73	.361	-1.87	.133
Intercept		-4.27	.015 *	-4.23	.045 *
<u>Model Summary Statistics</u>					
-2 log likelihood			120.361		90.824
Model Chi-square		(df = 11)	61.537	(df = 10)	31.645
P-value			.000		.001
Percent correctly classified			82.6%		78.7%

*Significant at the .10 level or less (two-tailed).