Do the Merits Matter More?
Class Actions under the
Private Securities Litigation Reform Act

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Abstract: Congress passed the Private Securities Litigation Reform Act of 1995 in an attempt to discourage meritless securities fraud class actions. This paper uses damages, accounting, insider trading and governance variables to explain the incidence of securities fraud litigation both before and after the passage of the PSLRA. Using a matched sample of sued and non-sued firms from the computer hardware and software industries, we find that accounting and insider trading, which did not correlate with the incidence of litigation prior to the passage of the PSLRA, are significant after the passage of the PSLRA. This finding is confirmed by our analysis of allegations and outcomes. Our accounting variables do not explain the incidence of pre-PSLRA accounting allegations, but they become significant after the passage of the PSLRA. Similarly, insider trading variables do not explain insider trading allegations before the PSLRA, but net sales by insiders correlate with such allegations after its enactment. Finally, we find no correlation between lawsuit outcomes and our accounting variables before the PSLRA, but accounting variables are significant after its enactment. Abnormal insider sales correlate with outcomes before the PSLRA, but not after. Overall, we interpret our findings as evidence that the PSLRA has furthered Congress's goal of discouraging frivolous securities fraud lawsuits.

Keywords: Securities litigation, litigation risk, accounting fraud, insider trading.

I. INTRODUCTION

Do the merits matter in securities fraud class actions? This question captured the attention of both scholars (Alexander, 1991) and legislators in the early 1990s (Hearings, 1995). Congress eventually concluded that the potentially enormous damages in securities fraud class actions were encouraging meritless "strike" suits. In Congress's view, plaintiffs' lawyers were filing suits "citing a laundry list of cookie-cutter complaints" against companies "within hours or days" of a substantial drop in the company's stock price (H.R. Rep., 1995). Moreover, plaintiffs' lawyers had incentives to "file frivolous lawsuits in order to conduct discovery in the hopes of finding a sustainable claim not alleged in the complaint" (S. Rep., 1995).

In an attempt to discourage such suits, Congress adopted the Private Securities Litigation Reform Act of 1995 ("PSLRA"). The PSLRA erects a series of procedural barriers, which have resulted in a higher percentage of securities fraud class actions being dismissed (Levine and Pritchard, 1998). The number of suits being filed, however, has not declined. After an initial dip, the number of securities fraud class actions has returned to, and even exceeded, its pre-PSLRA level. (Foster et al., 2000). The larger number of filings suggests that the PSLRA may have done little to discourage the filing of frivolous suits, although it may have increased their likelihood of dismissal. Plaintiffs' lawyers respond that the suits have *always* been merit driven and that the only thing that has changed post-PSLRA is that meritorious suits are now being dismissed. The upsurge in filings simply reflects a massive expansion in the amount of fraud being committed (Lerach 2001). Perhaps reduced exposure to liability has encouraged companies to be more aggressive in their reporting (Bernardo, Talley and Welch 2000). The plaintiffs' bar can find support for their position in concerns expressed by the SEC about the quality of financial reporting (Levitt 1998).

A more cynical explanation for the surge in filings posits that plaintiffs' lawyers are incapable of sorting fraud from bad luck based on the information available to them. Consequently, they sue on bad news that may reflect either; if they can withstand the issuer's inevitable motion to dismiss, they can gain access to discovery of the corporation's internal documents that will allow them to determine whether fraud has been committed. A higher dismissal rate means that plaintiffs' lawyers need to file more suits in hopes that a reasonable number will make it through to discovery.

Which brings us back to our initial question, in slightly revised form: Do the merits matter *more* in securities fraud class actions after the passage of the PSLRA? The impact of the PSLRA has taken on new significance in the political climate engendered by recent accounting and insider trading scandals at Enron, Worldcom and other companies. Numerous proposals have been introduced in Congress, including a number that would roll back certain reforms adopted as part of the PSLRA. So far, that debate has been driven by scandal; few empirical studies assess the impact of the PSLRA.

This study offers evidence on the role that the merits play in securities litigation before and after the passage of PSLRA. We examine three aspects of class actions relevant to that assessment: the filing of suits, the basis for the allegations in those suits, and their resolution. Our research hypothesis: By raising the bar for adequately pleading a securities fraud complaint, the PSLRA increased the importance of merit-based factors – including violations of accounting principles, insider trading, and weak monitoring environments – in explaining the incidence, type of allegations, and resolution of securities fraud class actions.

To test that hypothesis, we construct a sample of companies in the high technology sector, a favorite target of securities fraud class actions. We identify the firms sued in that industry before and after the enactment of the PSLRA, matching those firms with a control sample of non-sued firms from the same industry that experienced similar, contemporaneous price drops. We then use a logit regression model with damages, accounting, insider trading, and governance variables to explain the variation in the incidence of litigation between the sued and non-sued samples.

We find that our two variables intended to capture the role of damages calculations in the decision to sue, share turnover and firm size, are significant both before and after the passage of the PSLRA. Our other variables have been found in prior work to correlate with the incidence of fraud. In recognition of the prevalence of accounting allegations in post-PSLRA complaints, we include in our regression model variables that reflect aggressive accounting choices, such as abnormal accruals and an index of sales growth, as well as more conspicuous accounting problems like earnings restatements. We find that these variables are insignificant prior to the enactment of the PSLRA, but abnormal accruals and restatements are positively associated with the filing of post-PSLRA suits. We also include two measures of insider trading: a measure of net sales by insiders and a measure of abnormal net sales by insiders. Although both measures provide plaintiffs' lawyers with a basis for pleading fraudulent intent, the latter measure is more consistent with the standard that courts apply. Neither measure is significant pre-PSLRA, but the net insider sales variable is negative and significant post-PSLRA, suggesting that firms with a high level of insider selling were more likely to be sued. Finally, our governance variables are generally insignificant in both periods, indicating that governance structure is not a major determinant of lawsuit filings, conditional on our other fraud variables.

We also examine the incidence of the accounting and insider trading allegations that are increasingly prevalent in securities fraud complaints. The SEC has made accounting fraud an enforcement priority over the last few years and the increase in options-based compensation schemes has created additional opportunities for insider trading by company managers. Courts recognize both accounting violations and insider trading as supporting an inference of fraudulent intent. Do allegations by plaintiffs' lawyers correlate with aggressive accounting choices and insider trading that are unusual in amount or timing, or are the allegations simply an attempt to satisfy pleading standards? Moreover, is the correlation stronger or weaker after the enactment of the PSLRA's more stringent pleading standard? We find that our accounting variables have no explanatory power for pre-PSLRA accounting allegations, but restatements correlate positively with accounting allegations after the passage of the PSLRA. Similarly, the level of insider trading is significant in explaining the incidence of insider trading allegations after the passage of the PSLRA, but not before.

Understanding the incidence of lawsuit filings and the allegations in those filings is an important element in evaluating the impact of the PSLRA. Both companies and investors, however, are more likely to be concerned with the impact of the PSLRA on lawsuit outcomes. Accordingly, we also use the accounting, insider trading, and governance in a regression explaining the outcome of the litigation. Do these variables explain more of the variation in likelihood of settlement after the passage of the PSLRA? We find that restatements correlate positively with the likelihood of a settlement for more than nuisance value after the PSLRA, as does the percentage of equity held by company insiders. Abnormal trading by insiders, however, correlates with likelihood of settlement only before the PSLRA.

The remainder of the paper proceeds as follows. Section II provides institutional background on the PSLRA and discusses related research. Section III develops our hypotheses.

Section IV describes the sample selection procedure and data collected. Section V presents our results. Section VI concludes the paper with a summary and discussion of our major findings.

II. THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

The PSLRA was enacted into law on December 22, 1995, when the Senate followed the House's lead in overriding President Clinton's veto. Although Clinton had initially expressed support for securities litigation reform as a means of discouraging frivolous litigation, he warned in his veto message that the measure passed by Congress would also discourage meritorious suits (Clinton 1995).

The PSLRA contains a number of hurdles for plaintiffs filing securities fraud complaints. First, it establishes a rigorous pleading standard requiring plaintiffs to specify in their complaint each statement alleged to have been misleading and the reasons why the statement is misleading. In addition, the pleading standard requires plaintiffs to state with particularity facts giving rise to a "strong inference" that the defendant acted with "the required state of mind." Second, the PSLRA creates a "safe harbor" for forward-looking projections if they are not knowingly false, or have been qualified by "meaningful cautionary language" (see Johnson, Kasznik, and Nelson (2001) for additional discussion of this provision). Third, plaintiffs' difficulties in pleading a complaint are exacerbated by the fact that the PSLRA also deprives them of the usual access to discovery to bolster their complaint. This provision is intended to prevent plaintiffs from conducting a "fishing expedition" for evidence to support their claims after they have already filed a lawsuit. Finally, the PSLRA requires judges to impose monetary sanctions on those who file frivolous claims. Cumulatively, these procedural requirements present a substantial obstacle to weak claims (Walker, Levine and Pritchard 1997).

The available evidence suggests that market participants believed that, in general the PSLRA benefited shareholders. Spiess and Tkac (1997) and Johnson, Kasznik, and Nelson (2000) and document that the PSLRA was wealth-increasing, on average, for shareholders in high technology firms. Specifically, there was a significant negative market reaction to the rumors of President Clinton's veto, followed by a significant positive reaction to the override.[1] In addition, Johnson, Kasznik, and Nelson (2000) find that the stock price reaction varies cross-sectionally with firms' litigation risk, with the firm-specific probability of litigation estimated using a broad set of market-based and financial reporting variables. The evidence indicates that although the market response to the PSLRA is increasing in firms' overall risk of litigation, it is decreasing in the incremental probability of being sued for committing fraud. Collectively, these findings indicate that shareholders generally believe that they benefit from the PSLRA's restrictions on private securities litigation, although these benefits are diminished when other mechanisms for curbing fraudulent activity are inadequate. The perceived deterrent value of class actions, not surprisingly, appears to relate to the likelihood of committing fraud.

One of the most significant and contentious provisions instituted by the PSLRA was the stringent pleading standard requiring plaintiffs to state with particularity facts giving rise to a "strong inference" that the defendant acted with the "required state of mind." This provision was specifically cited by President Clinton as one of his reasons for vetoing the bill. The provision and its legislative history are ambiguous, however, which has led courts to interpret the standard in diverse ways (Grundfest and Pritchard 2002). Most notably, the Ninth Circuit, which encompasses Silicon Valley, surprised many observers by adopting a particularly stringent

[1] Johnson, Kasznik, and Nelson (2000) examine a sample of firms from three industries – pharmaceuticals, computer hardware and computer software. The significant positive reaction to the Senate override was only observed for the subsample of pharmaceutical firms. Spiess and Tkac (1997) also include retail firms in their analysis.

interpretation in their *Silicon Graphics* decision. Prior to this ruling, the Ninth Circuit had the least stringent requirements for pleading fraud of all circuit courts. For a sample of high technology companies, Johnson, Nelson and Pritchard (2000) find a positive market reaction to the *Silicon Graphics* decision, particularly for firms headquartered in the Ninth Circuit and those at greatest risk of being sued in a securities class action. As with the passage of the PSLRA, however, this positive effect diminishes as the probability of being sued for committing fraud increases.

These results relating to the implementation of the PSLRA bolster the conclusion that market participants believed that its restrictions on private securities litigation generally benefited shareholders of high technology firms. This reaction presumably reflects an assessment by those participants that the PSLRA discourages the filing of non-meritorious claims, without unduly chilling meritorious claims and the deterrent benefits that they may produce. That assessment, however, may have been fueled by popular perceptions and anecdotal evidence; market participants may not have the information and/or expertise to assess whether the PSLRA had its desired effect of reducing non-meritorious claims. Stock price reactions are, at best, indirect evidence of the effect of the PSLRA on lawsuit filings.

In addition to studies examining the market reaction to passage of the PSLRA and judicial interpretation of its pleading standard, other studies compare the frequency of lawsuit filings and type of allegations before and after the passage of the PSLRA (Grundfest and Perino 1997; PricewaterhouseCoopers 2000; Perino 2002). Merely counting the number of filings, however, provides no direct evidence on whether the PSLRA has achieved its stated objective of reducing non-meritorious securities litigation because exogenous variables, such as the level of fraud and the alternative opportunities available to plaintiffs' attorneys, may also affect the number of filings. Moreover, simply surveying the type of allegations does not measure the strength of those allegations. Beatty, Drake and Hogan (2001) find that the risk of litigation in connection with an IPO declined significantly following the enactment of the PSLRA, but they do not provide evidence on the determinants of those filings. Finally, Bajaj, Mazumdar and Sarin (2000) find that while mean settlements increased after the passage of the PSLRA, investors recovered a smaller percentage of potential losses. They do not, however, compare systematically whether the determinants of those settlements have changed with the adoption of the PSLRA.

III. HYPOTHESES

In this section, we develop hypotheses concerning the determinants of (a) class action filings, (b) allegations of accounting fraud and insider trading; and (c) lawsuit outcomes. Collectively, the objective of these hypotheses is to determine the influence of factors related to fraud in securities litigation, and whether that influence has increased with the passage of the PSLRA.

A. Lawsuit Filings

Congress's primary purpose in enacting the PSLRA was to discourage weak or frivolous securities fraud suits. Congress believed that many such suits were being filed based on little more than a stock-price drop, the principal criterion for establishing the damages necessary to justify the risk and expense of a lawsuit. The plaintiffs' and defense bar (along with outside observers) agree that the PSLRA makes it more difficult to adequately plead a securities fraud class action. For example, the pleading requirement demands much greater specificity from plaintiffs in drafting complaints. Presumably plaintiffs' lawyers can most easily satisfy this requirement in those cases with the strongest evidence of fraud, such as clear violations of generally accepted accounting principles or large amounts of selling by insiders. On the other hand, plaintiffs' lawyers claim that the PSLRA has chilled meritorious claims because the pleading requirement is overly restrictive. If the pleading requirement is a clumsy screen, discouraging meritorious and non-meritorious claims alike, lawsuits may have no greater indicia of merit than before the passage of the PSLRA. Moreover, the discovery stay imposed by the PSLRA eliminates plaintiffs' lawyers' access to the most important source of evidence of potential fraud, the issuer's internal records. If the discovery stay discourages meritorious claims because plaintiffs' lawyers fail to pursue claims that they believe cannot be established without discovery, the PSLRA will not achieve its goal of requiring plaintiffs' lawyers to focus on the merits of claims. Accordingly, our first hypothesis is that:

> H1: Aggressive accounting, insider trading and governance factors are more important in explaining lawsuit filings under the PSLRA than before it was enacted.

B. Strength of Allegations

Grundfest and Perino (1997) and PricewaterhouseCoopers (2000) attempt to assess the impact of the PSLRA on securities litigation by looking for material changes in the frequency of particular allegations. This approach, however, does not consider whether a shift in the type of allegations reflects a change in the strength of the complaints being filed, or is instead driven by a change in the litigation environment itself. Prior to the PSLRA, plaintiffs based many claims on assertions that companies had released misleading financial projections or other forward-looking statements (e.g., Francis, Philbrick, and Schipper 1994). While the PSLRA raised the pleading requirement for all allegations, the statutory safe harbor for forward-looking statements makes it particularly difficult to plead and prove claims based on these statements. As a consequence, forward-looking statements may be disfavored source for allegations under the new regime. At the same time, the heightened pleading standard gives plaintiffs' lawyers an incentive to assert violations of generally accepted accounting principles (GAAP) and insider trading. These types of allegations may provide an appearance of objective evidence that the firm and its managers intentionally mislead the investing public and profited from the fraud, which would form a basis for inferring scienter. Thus, one explanation for the recent increase in lawsuits containing allegations of accounting fraud and insider trading (Grundfest and Perino 1997; PricewaterhouseCoopers 2000) is that plaintiffs' lawyers include allegations in their complaints that they believe will be most likely to withstand a motion to dismiss, whether or not the allegations are warranted.

An alternative explanation for the increase in these types of allegations is that fraud has become more prevalent in recent years. Former SEC Chairman Arthur Levitt (1998) has lamented what he perceives as a decline in the quality of financial reporting. His lament gains credence from the number of high profile cases of accounting manipulations reported in recent years, including well-known companies such as Cendant, Sunbeam, and most recently and spectacularly, Enron and Worldcom. In addition, the temptation to engage in insider trading may have increased in recent years due to the increased prevalence of option-based compensation schemes, which may provide management an incentive to temporarily inflate stock prices in order to liquidate their holdings.[2] Our second hypothesis is that:

H2: Aggressive accounting and insider trading are more important in explaining allegations of accounting fraud and insider trading under the PSLRA than before it was enacted.

C. Lawsuit Outcomes

Our final hypothesis follows closely from the first two. Assuming that plaintiffs' lawyers

[2] Such compensation would, of course, be quite prevalent among our sample of high-technology companies, so if such a relation exists, it would be most likely to show up in our sample.

seek to maximize the fees available to them, the incidence of filing and the content of those complaints should be driven by those attorneys' expectations regarding the outcomes of those suits. If judges are able to use the tools provided by the PSLRA as Congress intended, weak suits will be screened out at the motion to dismiss stage. Alternatively, plaintiffs' attorneys and defendants will settle weak claims for nominal amounts reflecting the nuisance value of avoiding attorneys' fees for the defendants and the distraction of corporate executives created by a pending lawsuit.

Plaintiffs' attorneys, however, claim that settlement amounts have always been driven by the merits of the claims, at least when the defendants are solvent (Savett, 1997). If this is true, merits factors will play a similar role in explaining settlement amounts both before and after the passage of the PSLRA. Accordingly, our third hypothesis is that:

H3: Accounting, insider trading and governance factors are more important in explaining lawsuit outcomes under the PSLRA than before it was enacted.

IV. SAMPLE SELECTION AND VARIABLE MEASUREMENT

A. Sample

Our initial sample consists of all computer hardware and software firms (SIC codes 3570-3577 and 7370-7379) listed on CRSP and Compustat during the period 1991-2000. Focusing on firms in this industry allows us to control for industry-specific factors. Moreover, the high tech sector has been a frequent target for class actions both before and after the PSLRA. We determine which of these firms were sued in securities fraud class actions using the Securities Class Action Alert to identify firms sued in 1991-1995 (pre-PSLRA) and the Stanford Securities Class Action Clearinghouse (http://securities.stanford.edu) to identify firms sued in 1996-1999 (post-PSLRA). Data from these sources, along with disclosures in firms' 10-K Legal

Proceedings section, discussions of cases in judicial opinions and data generously provided by PricewaterhouseCoopers, were used to identify the date the lawsuit was filed, the class period, the types of allegations contained in the complaint, and the lawsuit outcome.

Financial and accounting data are obtained from CRSP and Compustat tapes. Information regarding corporate governance structure is obtained from the firm's last proxy statement prior to the beginning of the class period if available; if not, the first available proxy after the beginning of the class period is used.[3] Restatement data are obtained from a Lexis search of news stories as well as the company's periodic filings with the SEC.

Table 1, Panel A reports descriptive statistics on lawsuit filings. For firms with the necessary data, we identify 119 lawsuits filed against the firms in our sample, 51 in the pre-PSLRA period and 68 in the post-PSLRA period. The data reveal that the number and proportion of suits with accounting allegations increased dramatically following enactment of the PSLRA. In the pre-PSLRA period, slightly more than one in four lawsuits (27.4%) contained an accounting allegation. In the post-PSLRA period, more than half of the lawsuits (57.3%) contained an accounting allegation. One possible explanation for this increase, espoused by some members of the plaintiffs' bar (e.g., Lerach 2001), is that there has been a decline in the quality of financial reporting in recent years. The increase in accounting allegations is also consistent, however, with plaintiffs' lawyers attempting to meet the higher pleading standard of the PSLRA through allegations of accounting fraud.

In addition to an increase in accounting allegations, the passage of the PSLRA is associated with an increase in allegations of insider trading**.** As reported in Panel A of Table 1, the proportion of suits alleging insider trading more than doubled, from an average annual rate of

[3] These data requirements necessarily exclude firms conducting initial public offerings, a popular target for class action filings. Consequently, our sample consists of firms accused of committing fraud on the secondary markets.

33.3% in the pre-PSLRA period to 75.0% in the post-PSLRA period. This trend is consistent with an increase in the use of stock-based compensation over our sample period, but, as with the increase in allegations of accounting fraud, it is also consistent with plaintiffs' lawyers adapting the form of their complaints in an attempt to meet the PSLRA's standards.

Table 1, Panel B reports descriptive statistics on lawsuit outcomes. The mean settlement value post-PSLRA is approximately twice the pre-PSLRA figure. However, this disparity appears to be driven by a few large settlements in the post-PSLRA period, as the median settlement value is lower in the post-PSLRA period. The mean and median settlement value is likely understated for the post-PSLRA period, as twelve suits remain pending as of the date of this paper, and suits with greater settlement value generally take longer to resolve.

We also select a control sample from all firms in the initial sample that were not sued during our nine year sample period, matching each sued firm with a non-sued firm from the same industry. To identify the matched firm, we first determine the minimum one-day return (*Min. Return*) for each sued firm during the 250 trading days preceding the end of the class period. For most of the sued firms, this minimum return occurred on the day that the bad news giving rise to the lawsuit was revealed. Plaintiffs' attorneys look for such drops as an initial screen in selecting which firms to sue. Not all firms with large price drops get sued, however; plaintiffs' attorneys will look among the firms with price drops for other indicia that suggest a suit is likely to be profitable (Jones and Weingram, 1996a). Some price drops reflect bad luck, others reflect the revelation of fraud. Accordingly, we select a match firm by identifying from the initial sample the non-sued firm with proxy data available that has the minimum one-day return closest in magnitude to the sued firm's return during the class period.[4] Thus, our matched firms suffered

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These suits are the principal focus of the PSLRA.

[4] For a handful of firms we had difficulty finding matches with available proxies. For these firms, we relaxed the

similar price drops but were not sued. Matching on this basis controls for this important factor in the incidence of litigation. As a result, differences between our sued firms and non-sued firms should reflect the decision-making process that plaintiffs' attorneys use in selecting firms to sue among those with large price drops.

The descriptive statistics reported in Table 2, Panel A indicate that *Min. Return* is significantly more negative in the post-PSLRA period, suggesting that larger price drops are required to trigger a lawsuit. A comparison of the lawsuit and control firms in the pre-PSLRA (Panel B) and post-PSLRA (Panel C) periods, however, indicates that there is no statistical difference in *Min. Return* between the lawsuit and control firms in either period, suggesting that our matching procedure successfully controls for this important factor in the incidence of litigation.

B. Variable Definitions and Descriptive Statistics

We construct four sets of variables that are intended to capture factors that explain how securities class action lawsuits are filed and resolved. For both the lawsuit firms and their matches, we measure these variables to correspond with the class period. Details of variable measurement are reported in the Appendix.

The first set of variables, which we label damages variables, captures elements of the damages calculation for securities fraud suits that have been found in prior research to be significant factor in lawsuit filings (e.g., Francis, Philbrick, and Schipper 1994; Jones and Weingram 1996a,b; Skinner 1996). This research shows that market capitalization (*Market Cap.*), and share turnover (*Turnover*) are positively associated with the incidence of lawsuits. Panel A of Table 2 indicates that there is no statistical difference in firm size between the pre- and post-PSLRA periods, although share turnover is significantly higher post-PSLRA. Panels B

match procedure to include three months after the end of the class period for the sued firm.

and C of Table 2 indicate that lawsuit firms are larger at the median than the control firms in both the pre- and post-PSLRA periods, and are also more actively traded in both periods. Both of these findings are consistent with expectations.

The second set of variables, which we label accounting variables, captures aggressive accounting choices of the sample firms. The first variable, *Restatement*, is an indicator variable equal to one for firms that restated earnings during the class period. The public announcement of an earnings restatement is likely to be a particularly prominent signal for plaintiffs' lawyers. For example, Jones and Weingram (1996b) find that accounting restatements increase a firm's probability of facing a class action suit. The second measure, *Abnormal Accruals*, attempts to measure earnings management by separating out the portion of total accruals that are due to management's exercise of discretion from the estimated "normal" accruals that are attributable to the firms' operations and economic environment. DuCharme et al. (1999) find that abnormal accounting accruals (measured over an extended period) have a significant positive relation to subsequent litigation, but settlements are negatively related. Heninger (2001) finds a positive relation between income-increasing abnormal accruals and the incidence of lawsuits against firm auditors. These findings suggest that insiders may commit fraud to maintain the appearance of success during a financial downturn. The third measure, S*ales Growth*, captures the fact that growth companies are commonly believed to have greater incentives to commit financial statement fraud to meet earnings targets.

The descriptive statistics reported in Table 2, Panel A indicate a significantly greater number of restatements and higher sales growth in the post-PSLRA period, but no difference in abnormal accruals. Panels B and C reveal that lawsuit firms report significantly more restatements than control firms, particularly in the post-PSLRA period, and significantly higher sales growth. Only in the post-PSLRA period, however, is there a significant difference in the abnormal accruals of lawsuit and control firms.

The third set of variables, which we label trading variables, captures an important motivation for fraud by company managers. Jones and Weingram (1996b) find that insider trading does not increase firms' litigation risk. Johnson et al. (2000), however, do find evidence that sales by insiders affect the likelihood of suit. Summers and Sweeney (1998), studying financial statement frauds reported in the *Wall Street Journal*, find that fraud company insiders are selling their stock during the fraud period. Niehaus and Roth (1999) find that insider managers are net sellers of their firm's stock during the class period, but the sales do not significantly differ from their prior selling practices. The difference between the two measures of insider trading suggested by Niehaus and Roth is important: only *abnormal* insider selling is considered by courts to give rise to an inference of scienter (Sale 2002). Accordingly, we construct two insider trading variables, following Beneish and Vargus (2001): *Insider Trading*, which is the net purchase and sale activity during the class period for directors, CEOs, COOs, CFOs, Presidents and Vice-Presidents, and *Abnormal Insider Trading*, which is the difference between *Insider Trading* and net purchase and sale activity during the one-year period preceding the class period. A negative (positive) value for these variables indicates net sales (purchases).

Panel A of Table 2 shows that mean net insider sales were significantly higher during the post-PSLRA period, consistent with the increasing importance of option-based compensation during this period. The difference is not significant at the median, however, and neither is the difference in abnormal insider selling between the pre- and post-PSLRA periods. Comparing the lawsuit and control samples in Panels B and C reveals that insiders of lawsuit firms sold significantly more of their company's stock during the class period, particularly after the

PSLRA, but there is no statistical difference in abnormal insider sales between the lawsuit and control firms in either the pre- or post-PSLRA periods. Thus, plaintiffs' attorneys appear to focus on the level of insider sales rather than on the abnormal sales that are relevant under the law.

The final set of variables in our model, which we label governance variables, captures characteristics of firms' corporate governance structures that permit aggressive financial reporting and the motivations for such behavior. For example, Dechow et al. (1996) find that firms accused by the SEC of manipulating earnings are more likely to have insider-dominated boards. Beasley (1996) finds that a greater percentage of outside directors, as well as greater ownership and longer tenure for those directors, correlate with a lower likelihood of fraud. Holding a greater number of directorships in other firms, however, correlates positively with fraud. Our governance structure variables are (i) *Avg. Tenure*, the average number of years outside directors have served on the Board, (ii) *Busy*, the average number of other directorships held by outside directors, (iii) *Independent*, the percentage of outside directors, (iv) *Outsider Holdings*, the average equity holdings of outside directors as a percentage of total shares outstanding, and (v) *Insider Holdings*, the average equity holdings of inside directors as a percentage of total shares outstanding.[5] Insiders with greater holdings may be at less risk of termination for poor performance and thus have less incentive to commit fraud. Moreover, they may suffer greater costs from fraud. The effect of insider holdings may be more ambiguous in the context of settlement negotiations – insiders with greater wealth at risk in litigation may be more anxious to resolve claims against the company through an early settlement.

Table 2, Panel A reveals no significant differences in the five governance variables between the pre- and post-PSLRA periods. The comparisons in Panels B and C provide some evidence that lawsuit firms have governance structures that provide less management oversight. The outside directors of lawsuit firms sit on significantly more boards than the directors of the control firms, both before and after the PSLRA. This may reflect the greater market capitalization of the sued firms, as directors of large firms tend to sit on a greater number of boards (Ferris, Jagganathan and Pritchard 2002). Outside directors of lawsuit firms also hold less equity than do directors of control firms in the both the pre- and post-PSLRA periods, but the difference is significant only in the pre-PSLRA period. Insiders of the control firms hold more equity, but this difference is significant only in the post-PSLRA period. Finally, contrary to expectations, boards of lawsuit firms are more independent in the post-PSLRA period.

V. RESULTS

A. Determinants of lawsuit filings

We examine lawsuit determinants in the pre- and post-PSLRA periods using a logit model that explains lawsuit filings (*Lawsuit*) as a function of the variables described above:

$$\begin{aligned}Lawsuit = a &+ b_1 Market\ Cap. + b_2 Turnover + b_3 Restatement^{*} + b_4 Abnormal\ Accruals \\ &+ b_5 Sales\ Growth + b_6\ Insider\ Sales + b_7\ Abnormal\ Insider\ Sales \\ &+ b_8 Avg.\ Tenure + b_9 Busy + b_{10} Independent + b_{11} Outsider\ Holdings \\ &+ b_{12} Insider\ Holdings + e\end{aligned} \tag{1}$$

All variables are defined above except for *Restatement**. We use this alternative measure of accounting restatements, equal to one for firms that restated their earnings anytime during 1991-1995 (for pre-PSLRA lawsuit firms and their matches) or 1996-2000 (for post-PSLRA lawsuit firms and their matches), because we were unable to estimate the model using *Restatement* as our measure of restatements due to a quasi-complete separation of the data in the post-Act period.

[5] "Gray" directors are classified as insiders in measuring all of these variables.

Accordingly, we estimate this model using the less precise measure of restatements. This measure biases against finding results consistent with our hypothesis.

The results are reported in Table 3. In the pre-PSLRA period, the results indicate that both damages variables are significant. Specifically, consistent with prior research (Jones and Weingram 1996a,b), large, actively traded firms are significantly more likely to be sued than other firms. In contrast, the merit-based variables are insignificant with the exception of *Insider Holdings*. These results support the contention that lawsuit filings prior to the PSLRA were largely driven by factors unrelated to the likelihood of fraud.

The post-PSLRA results reported in the right-hand portion of Table 3 present a strikingly different picture of lawsuit filings under the PSLRA. In addition to the two damages variables, several of the variables related to fraud are individually significant in the post-PSLRA period. Specifically, two of the three accounting variables – *Restatement** and *Abnormal Accruals* – are significant in the predicted direction. Thus, in the post-PSLRA period, firms engaging in aggressive accounting practices were more likely to be sued than similar firms with less aggressive accounting. In addition, *Insider Trading* is negative and significant, indicating that firms with a high level of stock sales by insiders were more likely to be sued. Our measure of abnormal insider trading, however, is insignificant, despite being more consistent with applicable legal standards for assessing fraudulent intent. Finally, firms whose directors sat on more boards of other firms were more likely to be sued. Overall, a comparison of the results in the pre- and post-PSLRA periods suggests that merits variables play a greater role in explaining the incidence of suit after the passage of the PSLRA.

B. Determinants of accounting fraud and insider trading allegations

We examine determinants of accounting and insider trading allegations in the pre- and post-PSLRA periods using the following logit models:

$$\begin{aligned} \textit{Accounting Allegation} = a + b_1 \textit{Insider Allegation} + b_2 \textit{Restatement} \\ + b_3 \textit{Abnormal Accruals} + b_4 \textit{Sales Growth} \\ + b_5 \textit{Avg. Tenure} + b_6 \textit{Busy} + b_7 \textit{Independent} \\ + b_8 \textit{Outsider Holdings} + b_9 \textit{Insider Holdings} + e \end{aligned} \tag{2a}$$

$$\begin{aligned} \textit{Insider Allegation} = a + b_1 \textit{Accounting Allegation} + b_2 \textit{Insider Sales} \\ + b_3 \textit{Abnormal Insider Sales} + b_4 \textit{Avg. Tenure} \\ + b_5 \textit{Busy} + b_6 \textit{Independent} + b_7 \textit{Outsider Holdings} \\ + b_8 \textit{Insider Holdings} + e \end{aligned} \tag{2b}$$

where *Accounting Allegation* and *Insider Allegation* are set equal to one if the lawsuit contained an allegation of accounting fraud or insider trading, respectively. We include Insider Allegation as a control for equation 2a and Accounting Allegation as a control for 2b because allegations like these may be convenient alternatives to include in complaints when alternative bases for pleading fraud (such as forward-looking statements) are unavailable. The remaining variables are as defined above.

The results for the accounting allegations model are reported in Panel A of Table 4. There is no evidence of a significant relation between accounting allegations and any of our accounting variables before the passage of the PSLRA. The only variable that is significant in the pre-PSLRA period is the existence of an insider trading allegation. In contrast to these results, *Restatement* is statistically significant post-PSLRA while *Insider Allegation* is not. Thus, it appears that allegations of accounting fraud have greater merit in the post-PSLRA period than in the pre-PSLRA period.

The analysis of insider trading allegations reported in Panel B of Table 4 once again reveals a strong association between insider trading allegations and accounting allegations in the pre-PSLRA period. However, there is no evidence of an association between insider trading allegations and either of our insider trading variables. In addition, there is a significant negative association between insider trading allegations and the governance measure *Avg. Tenure*. In the post-PSLRA, *Insider Trading* is negative and significant, but *Abnormal Insider Trading* remains insignificant. We conclude that plaintiffs' lawyers are paying more attention to establishing a motive for fraud in suits subject to the PSLRA, but that effort is not fully consistent with the established judicial doctrine, which would require that sales by insider be out of line with prior sales. This finding is consistent with that of Griffin and Grundfest (2002), who conclude that allegations of insider trading may be substantially overinclusive.

The correlation between the accounting and insider trading allegations before the PSLRA suggests that plaintiffs did not specifically identify the nature of the frauds alleged under that regime's looser standards. The PSLRA's pleading standard requires more specific allegations, with sanctions for allegations that are not factually supported. Accordingly, we see a closer link between allegations of accounting fraud and objective measures of accounting problems in the post-PSLRA period. We also see a closer link between insider trading allegations and net sales by insiders, although no correlation between abnormal selling and insider trading allegation. While our abnormal selling measure is closer to the standard applied by the courts, plaintiffs' lawyers are unlikely to face sanctions for relying on the looser net sales measure. Allegations based purely on net sales have a chance of withstanding a motion to dismiss, with the only downside for the lawyer being dismissal of the complaint.

C. Determinants of lawsuit outcomes

Our final analysis examines the outcome of litigation in the pre- and post-PSLRA periods using a logit model that explains variation in lawsuit outcomes as a function of the accounting, insider trading, and governance variables described above. We exclude the market variables from this regression because the dependent variable is intended to proxy for merit. Our dependent variable, *Settle*, is equal to zero if the lawsuit is dismissed or settled for nuisance value (defined as less than $2,000,000, a conservative estimate of defense costs), and equal to one if the lawsuit is settled for more than a *de minimis* amount.[6] We estimate the following regression:

$$\begin{aligned} Settle = a + b_1 Restatement + b_2 Abnormal\ Accruals + b_3 Sales\ Growth \\ + b_4 Insider\ Sales + b_5 Abnormal\ Insider\ Sales + b_6 Avg.\ Tenure \\ + b_7 Busy + b_8 Independent + b_9 Outsider\ Holdings + b_{10} Insider\ Holdings + e \end{aligned} \tag{3}$$

The results are presented in Table 5. In the pre-PSLRA period, only *Abnormal Insider Sales* is individually significant at traditional levels. In the post-PSLRA period, *Restatement* and *Insider Holdings* are significant in the predicted direction. When a firm is required to restate its financial statements, this apparently sends a strong signal to judges, who are more reluctant to dismiss cases with this type of allegation. Notably, *Insider Trading* is not significant in this model, despite its significant association with filings and insider trading allegations. The use by plaintiffs' lawyers of this cruder proxy for fraudulent intent is apparently not rewarded. The significance of *Insider Holdings*, which is not significant in the filing model, suggests that insiders with greater wealth at stake may be more risk averse in settlement negotiations.

VI. SUMMARY AND CONCLUSION

Our principal finding is that factors previously shown to relate to the likelihood of fraud, principally restatements and insider trading, play a more important role in explaining the

[6] We use a binary dependent variable in a logit model rather than an ordinary least squares regression because a properly-specified OLS regression would require an independent variable measuring directors & officers insurance coverage, a critical factor in assessing settlement amounts. This data is not publicly available.

incidence, allegations, and resolution of litigation post-PSLRA. Factors relating to fraud generally are insignificant before the passage of the PSLRA. Factors relating to damages continue to have explanatory power after the passage of the PSLRA. Damages factors, while unlikely to correlate with fraud, will always play a role in determining the incidence of suit because greater potential damages claims correlate with correspondingly greater attorneys' fees.

Nonetheless, we believe that our results show a closer relation between factors related to fraud and securities class actions after the passage of the PSLRA. The efficacy of deterrence necessarily depends upon the accuracy with which sanctions are assessed because deterrence requires both sanctioning wrongdoers and protecting the innocent from sanctions. Accordingly, the evidence that we find of more precise targeting of securities class actions against firms likely to have committed fraud suggests that Congress has achieved at least some of its objectives in adopting the PSLRA

To be sure, this conclusion comes with some caveats. Our model cannot explain all of the variation in the incidence of litigation. The unexplained variation undoubtedly has both merit and non-merit aspects. If the non-merit aspects predominate, our finding of a shift in the determinants of litigation may not hold.

An additional caveat arises from the fact that *Insider Trading* – the insider trading variable that is not adjusted for prior selling patterns – best explains variations in filing and allegations of insider trading suggests that there still is room for improvement. Perhaps allegations will more closely correspond with the law as plaintiffs' attorneys adjust to the new requirements of the PSLRA's pleading requirement. Our finding that *Insider Trading* does not correlate with litigation outcomes suggests that plaintiffs' lawyers are receiving feedback on this issue that should allow them to refine their filing decisions. Future research may find that *Abnormal Insider Trading* becomes a significant predictor of both filing and outcomes.

A more fundamental caveat is that our study design cannot measure the potential costs of the PSLRA's regime in discouraging suits that may have merit. Plaintiffs' lawyers may be unable to prove some meritorious claims under the rigorous constraints imposed by the PSLRA. Further research is needed to evaluate this potential cost of the PSLRA.

APPENDIX
Variable Definitions

Variable	Definition	Prediction
Market Cap.	Market value of common equity at the end of the fiscal year preceding the beginning of the class period	+
Turnover	$1 - (1 - \text{Turn})^{250}$, where Turn is average daily trading volume divided by the number of shares outstanding, and 250 is the number of trading days preceding the beginning of the class period	+
Restatement	Indicator variable equal to one if the firm restated earnings during the class period	+
Abnormal Accruals	Abnormal current accruals, equal to the residual from the estimation of the following model: $$\frac{CA_{i,t}}{TA_{i,t-1}} = \alpha_0 \frac{1}{TA_{i,t-1}} + \alpha_1 \frac{\Delta Sales_{i,t}}{TA_{i,t-1}} + \varepsilon_{i,t}$$ where year t is the fiscal year closest to end of the class period	+
Sales Growth	Sales growth index, calculated as $$\frac{Sales_t}{Sales_{t-1}}$$ where year t is the fiscal year closest to the end of the class period	+
Insider Trading	Shares purchased less shares sold during the class period for directors, CEOs, COOs, CFOs, Presidents and Vice-Presidents	–
Abnormal Insider Trading	Shares purchased less shares sold during the class period for directors, CEOs, COOs, CFOs, Presidents and Vice-Presidents less the same measure for the year preceding the class period	–
Avg. Tenure	The mean number of years that outside directors have been on board, prior to the beginning of the class period.	–
Busy	The mean number of external directorships of public companies held by outside directors	+
Independent	The percentage of outside directors on the firm's board.	–
Outsider Holdings	The mean holdings of outside directors as a percentage of total shares outstanding	–
Insider Holdings	The mean holdings of inside directors as a percentage of total shares outstanding	–/?

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TABLE 1
Descriptive Statistics on Lawsuits

Panel A: Number of filings and allegations

Lawsuit Year	Number of Suits	Accounting Allegations	Insider Trading Allegations
Pre-PSLRA:			
1991	10	3 (30.0%)	3 (30.0%)
1992	9	1 (11.1%)	3 (33.3%)
1993	10	3 (30.0%)	2 (20.0%)
1994	9	3 (33.3%)	5 (55.6%)
1995	13	4 (30.8%)	4 (30.8%)
	51	14 (27.4%)	17 (33.3%)
Post-PSLRA:			
1996	6	3 (50.0%)	5 (83.3%)
1997	17	7 (41.2%)	12 (70.6%)
1998	17	11 (64.7%)	12 (70.6%)
1999	19	12 (63.2%)	15 (78.9%)
2000	9	6 (66.7%)	7 (77.8%)
	68	39 (57.3%)	51 (75.0%)
Total	119	53 (44.5%)	72 (60.5%)

Panel B: Lawsuit outcomes

Outcome	Pre-PSLRA (N=51)	Post-PSLRA (N=68)
Dismissed	17	25
Settled (in millions):		
< 2	5	4
2 – < 5	4	11
5 – < 10	10	3
>10	13	9
Undisclosed	2	4
Pending	0	12
Mean	9.99	20.52
(including dismissals)	(6.52)	(10.26)
Median	7.75	4.43
(including dismissals)	(2.60)	(0.00)
Maximum	55.00	259.00
Minimum	0.63	< 0.01

TABLE 2
Descriptive Statistics of Regression Variables

Panel A: Pre-PSLRA compared to Post-PSLRA

	Pre-PSLRA (N = 101)			Post-PSLRA (N = 135)			Tests of Differences	
Variable	Mean	Median	Std. Dev.	Mean	Median	Std. Dev.	Mean	Median
Min. Return	–0.19	–0.18	0.11	–0.23	–0.20	0.11	**< 0.01**	**< 0.01**
Market Cap.	1774.93	214.60	5418.00	2806.13	201.14	8043.00	0.29	0.70
Turnover	0.63	0.67	0.26	0.69	0.73	0.23	**0.08**	**0.10**
Restatement	0.10	0.00	0.30	0.19	0.00	0.39	**0.06**	**0.07**
Abnormal Accruals	0.02	0.02	0.12	0.02	0.00	0.17	0.91	0.69
Sales Growth	1.25	1.17	0.46	1.38	1.29	0.56	**0.04**	**0.03**
Insider Trading	–0.10	–0.02	0.17	–0.17	–0.04	0.24	**< 0.01**	0.33
Abnormal Insider Trading	0.02	0.00	0.17	0.02	0.00	0.27	0.90	0.88
Avg. Tenure	5.98	5.50	4.16	5.30	5.00	3.48	0.19	0.22
Busy	1.69	1.50	1.15	1.49	1.50	1.13	0.17	0.22
Independent	0.58	0.60	0.16	0.60	0.60	0.19	0.49	0.35
Outsider Holdings	0.05	0.09	0.10	0.09	0.01	0.31	0.20	0.18
Insider Holdings	0.17	0.06	0.39	0.16	0.08	0.18	0.92	0.23

TABLE 2 - continued
Descriptive Statistics of Regression Variables

Panel B: Lawsuit firms compared to control firms in the Pre-PSLRA period

	Lawsuit Firms (N = 51)			Control Firms (N = 50)			Tests of Differences	
Variable	Mean	Median	Std. Dev.	Mean	Median	Std. Dev.	Mean	Median
Min. Return	–0.20	–0.18	0.11	–0.17	–0.15	0.11	0.18	0.14
Market Cap.	2320.27	687.47	6650.00	1194.03	62.58	3673.00	0.31	< **0.01**
Turnover	0.78	0.83	0.17	0.48	0.48	0.25	< **0.01**	< **0.01**
Restatement	0.12	0.00	0.33	0.08	0.00	0.27	**0.10**	**0.10**
Abnormal Accruals	0.01	0.02	0.11	0.03	0.02	0.14	0.51	0.74
Sales Growth	1.40	1.26	0.45	1.09	1.05	0.41	< **0.01**	< **0.01**
Insider Trading	–0.14	–0.03	0.19	–0.07	–0.01	0.13	**0.03**	**0.08**
Abnormal Insider Trading	0.04	0.00	0.19	0.01	0.00	0.16	0.50	0.24
Avg. Tenure	5.12	5.00	2.95	6.85	5.90	5.00	**0.04**	**0.10**
Busy	1.90	1.83	1.09	1.48	1.33	1.18	**0.07**	**0.03**
Independent	0.59	0.60	0.17	0.58	0.60	0.16	0.76	0.78
Outsider Holdings	0.02	0.01	0.05	0.08	0.03	0.13	< **0.01**	**0.02**
Insider Holdings	0.11	0.06	0.13	0.23	0.08	0.54	0.13	0.18

TABLE 2 - continued
Descriptive Statistics of Regression Variables

Panel C: Lawsuit firms compared to control firms in the Post-PSLRA period

	Lawsuit Firms (N = 68)			Control Firms (N =67)			Tests of Differences	
Variable	Mean	Median	Std. Dev.	Mean	Median	Std. Dev.	Mean	Median
Min. Return	–0.23	–0.20	0.12	–0.23	–0.21	0.10	0.97	0.86
Market Cap.	4068.57	312.72	8398.00	1518.93	63.67	7528.00	0.11	< **0.01**
Turnover	0.79	0.83	0.17	0.58	0.60	0.24	< **0.01**	< **0.01**
Restatement	0.28	0.00	0.45	0.09	0.00	0.29	< **0.01**	< **0.01**
Abnormal Accruals	0.05	0.02	0.20	–0.01	–0.02	0.13	**0.03**	**0.04**
Sales Growth	1.51	1.39	0.56	1.24	1.18	0.52	< **0.01**	< **0.01**
Insider Trading	–0.28	–0.23	0.26	–0.06	0.00	0.14	< **0.01**	< **0.01**
Abnormal Insider Trading	0.03	0.00	0.35	0.13	0.00	0.17	0.77	0.58
Avg. Tenure	5.25	5.25	2.58	5.35	4.00	4.22	0.87	0.28
Busy	1.77	1.84	1.09	1.21	1.00	1.11	< **0.01**	< **0.01**
Independent	0.65	0.67	0.17	0.54	0.57	0.20	< **0.01**	< **0.01**
Outsider Holdings	0.08	0.01	0.14	0.10	0.01	0.42	0.64	0.52
Insider Holdings	0.12	0.06	0.15	0.20	0.13	0.20	< **0.01**	< **0.01**

Variable definitions are in the Appendix. The pre-PSLRA period is 1991-1995 and the post-PSLRA period is 1996-1999.

TABLE 3
Determinants of Lawsuit Filings

Variable	Prediction	Pre-PSLRA Coeff.	Pre-PSLRA p-value	Post-PSLRA Coeff.	Post-PSLRA p-value
Constant	?	–1.93	**0.04**	-4.07	< **0.01**
Market Cap.	+	0.18	**0.08**	0.16	< **0.01**
Turnover	+	2.61	< **0.01**	2.36	< **0.01**
Restatement*	+	0.31	0.57	1.01	**0.01**
Abnormal Accruals	+	0.73	0.61	1.74	**0.04**
Sales Growth	+	0.26	0.54	0.17	0.56
Insider Trading	–	-1.30	0.30	-2.68	< **0.01**
Abnormal Insider Trading	–	0.75	0.47	0.90	0.14
Avg. Tenure	–	-0.06	0.22	0.02	0.56
Busy	+	0.20	0.30	0.23	**0.10**
Independent	–	-1.63	0.14	0.09	0.92
Outsider Holdings	–	-3.92	0.15	0.28	0.48
Insider Holdings	–	-0.98	**0.07**	0.69	0.53
Pseudo R^2		0.43		0.44	
N		101		135	

Variable definitions are in the Appendix. The pre-PSLRA period is 1991-1995 and the post-PSLRA period is 1996-1999.

TABLE 4
Determinants of Accounting and Insider Trading Allegations Conditional on a Lawsuit Filing

Panel A: Determinants of accounting allegations

Variable	Prediction	Pre-PSLRA Coeff.	Pre-PSLRA p-value	Post-PSLRA Coeff.	Post-PSLRA p-value
Constant	?	–0.89	0.55	–1.25	0.35
Insider Allegation	+	1.35	**0.01**	–0.54	0.25
Restatement	+	0.63	0.38	1.79	< **0.01**
Abnormal Accruals	+	–0.31	0.90	0.60	0.53
Sales Growth	+	–0.11	0.83	0.06	0.87
Avg. Tenure	–	0.09	0.32	0.07	0.37
Busy	+	–0.08	0.73	0.01	0.96
Independent	–	–0.39	0.83	1.18	0.35
Outsider Holdings	–	1.17	0.83	0.82	0.54
Insider Holdings	–	–2.28	0.32	1.49	0.44
Pseudo R^2		0.23		0.28	
N		46		66	

Panel B: Determinants of insider trading allegations

Variable	Prediction	Pre-PSLRA Coeff.	Pre-PSLRA p-value	Post-PSLRA Coeff.	Post-PSLRA p-value
Constant	?	–1.12	0.41	0.66	0.56
Accounting Allegation	+	1.41	< **0.01**	–0.60	0.16
Insider Trading	–	–0.73	0.52	–1.83	**0.04**
Abnormal Insider Trading	–	–1.31	0.30	–0.08	0.90
Avg. Tenure	–	–0.28	**0.01**	–0.03	0.73
Busy	+	0.46	0.08	–0.07	0.71
Independent	–	0.60	0.74	0.70	0.60
Outsider Holdings	–	2.14	0.74	2.25	0.16
Insider Holdings	–	2.61	0.22	–2.71	0.14
Pseudo R^2		0.36		0.20	
N		46		66	

Variable definitions are in the Appendix. The pre-PSLRA period is 1991-1995 and the post-PSLRA period is 1996-1999.

TABLE 5
Determinants of Lawsuits Settled for Greater Than Nuisance Value (> $2 Million)

		Pre-PSLRA		Post-PSLRA	
Variable	Prediction	Coeff.	p-value	Coeff.	p-value
Constant	?	–0.38	0.79	–0.01	1.00
Restatement	+	0.08	0.92	1.06	**0.04**
Abnormal Accruals	+	–3.56	0.14	–0.61	0.52
Sales Growth	+	0.71	0.27	–0.26	0.48
Insider Trading	–	1.15	0.31	0.02	0.98
Abnormal Insider Trading	–	–2.59	**0.05**	–0.41	0.54
Avg. Tenure	–	–0.06	0.41	–0.11	0.29
Busy	+	0.08	0.70	–0.14	0.46
Independent	–	0.33	0.83	0.87	0.56
Outsider Holdings	–	–0.48	0.92	–0.86	0.64
Insider Holdings	?	–1.76	0.40	3.78	**0.07**
Pseudo R^2		0.23		0.20	
N		49		52	

Variable definitions are in the Appendix. The pre-PSLRA period is 1991-1995 and the post-PSLRA period is 1996-1999.