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The Private Securities Litigation Reform Act of 1995: The Stock Market Casts its Vote...

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In December 1995, Congress overrode a presidential veto to enact the Private Securities Litigation Reform Act. This legislation was aimed at curbing abuses in class action securities litigation, and providing firms with relief from frivolous lawsuits brought on the basis of stock price volatility. While the intent of lawmakers in drafting this legislation was clear, the impact of the Reform Act for shareholders of firms that are likely targets of securities litigation was uncertain. In particular, it was unclear if the cost savings from reduced litigation would outweigh the potential losses due to decreased protection from fraudulent managers, and it was also unclear if the impact of the legislation would differ for firms with different governance structures. This paper provides an economic answer to these questions by analyzing the stock market's response to the initial passage, the veto, and subsequent veto override of the Reform Act. We examine the stock price performance of firms in four industries—biotechnology, computers, electronics, and retailing—that are likely to be affected by securities litigation reform. We document a significantly negative stock price response to rumors of the presidential veto and a significantly positive response to the subsequent House override vote, indicating that investors agreed with Congress that the positive effects of the Act predominate. We also examine reactions across subsets of firms with different levels of institutional ownership, different levels of insider ownership and with different board structures, and find evidence that the positive factors outweigh any increased susceptibility to managerial fraud or inability to bring meritorious suits, even among firms with weak internal governance structures. © 1997 John Wiley & Sons, Ltd.

INTRODUCTION

Congress began investigating the need for securities litigation reform in 1991. While there was little statistical evidence that the legal system was the subject of abuse, by 1993 it was clear that the American public perceived there was a significant problem in the area of securities litigation, and this perception was important enough to warrant legislative action.[1] Donald C. Langevoort, a professor at the Vanderbilt University School of Law, summarized this opinion in his testimony before the House in August, 1994:

> 'The major reason for reforming the securities litigation system, however, is one of perception: no matter what the degree of actual dysfunction, many economic actors plainly believe that the system is harmful and counterproductive because of its invitation to frivolous or unnecessary litigation. The perception that we have a fair, controlled system is crucial. I have no doubt that fear of dysfunctional litigation is adversely affecting capital marketplace decisions: whether companies go public, whether foreign companies seek listings on our stock exchanges and NASDAQ, whether voluntary disclosure occurs (and in what form).'[2]

The Private Securities Litigation Reform Act of 1995 (hereafter referred to as the Reform Act) was drafted to hinder potential abuses, and provide firms with some relief from frivolous lawsuits brought on the basis of stock price volatility.[3] Congress sought to address four principal abuses with this legislation:

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> '(1) the routine filing of lawsuits against issuers of securities and others whenever there is a significant change in an issuer's stock price, without regard to any underlying culpability of the issuer, and with only a faint hope that the discovery process might lead eventually to some plausible cause of action; (2) the targeting of deep pocket defendants, including accountants, underwriters, and individuals who may be covered by insurance, without regard to their actual culpability; (3) the abuse of the discovery process to impose costs so burdensome that it is often economical for the victimized party to settle; and (4) the manipulation by class action lawyers of the clients whom they purportedly represent.'[4]

The unanswered question is the extent to which this legislative remedy changed public perceptions about the state of securities litigation. This paper seeks to provide an economic answer to this question by analyzing the stock market's response to the initial passage, the Presidential veto, and the subsequent veto override of the Reform Act in December, 1995.[5] This approach follows the tradition of Ryngaert and Netter (1988) and Karpoff and Malatesta (1989), who investigate the stock price impact of legislation in the context of changes in state anti-takeover regulations.

Specifically, we analyze the stock return performance of a sample of firms in four industries—biotechnology, computers, electronics and retailing—that are likely to be affected by securities litigation reform. Stock prices reflect the market-wide valuation of a corporation, and finance theory predicts that there should be abnormal changes in this valuation when an unexpected event occurs. By measuring the stock market's reaction to the Presidential veto of the Reform Act and, separately, the subsequent override vote, we will be able to identify whether there was an aggregate change in the investing public's perception of the state of securities litigation. While there has been a fair amount of controversy, both in the private sector and among legislators, over the effects of the Reform Act, using a market-based measure allows us to gauge reaction by the investing public when it 'puts its money where its mouth is'.

The market impact of legislative action has not been widely studied in the finance literature due to the difficulty of isolating days on which events occur that change the expectations of investors. New legislation is often the result of months, or even years, of congressional debate and activity on the issue; passage or defeat is often predicted well in advance of the actual votes and, therefore, outcomes are rarely new information. This makes it difficult to judge the overall impact of the legislative action on shareholder wealth.[6] Like most legislative action, the Private Securities Litigation Reform Act certainly represents the end of a 'long and winding road' but that road did include some important surprises.[7] As detailed below, the President's veto and the subsequent Congressional override were sufficiently unexpected to cause a market reaction, and the direction of the reaction to these two unexpected events allows us to infer the market's assessment of the overall merits of the legislation.

We do not have a prior prediction about how the market's perception was altered by passage of the Act, due to its complexity and the economically ambiguous nature of some of its key provisions.[8] Instead, we couch our analysis of empirical results in terms of discovering whether perceptions were changed and whether this change was in keeping with the intentions of Congressional legislators. Briefly, our results are consistent with agreement between market investors and Congress that the positive effects of the Reform Act predominate. All four industries exhibit significantly negative abnormal returns in response to widespread rumors of the Clinton veto, and all four industries exhibit significantly positive abnormal returns on the day of (or the day after) the House override vote.

A secondary aspect of our analysis considers the extent to which the corporate governance structure of individual firms may be substitutable for legal remedies in the case of securities litigation. A weak governance structure, in which the objectives of managers are not well aligned with those of shareholders, may imply that managers are more likely to engage in fraudulent activity and, therefore, the firm is more likely to be the subject of a meritorious class action suit. To the extent that passage of the Reform Act makes it more difficult to bring all suits (meritorious as well as frivolous ones), firms with weak governance structures should be less positively affected by passage of the Act (and less negatively affected by increased expectation of its veto). On the other hand, firms with weak governance structures may also be more likely targets of frivolous class action lawsuits as the lack of managerial monitoring may cause investors to believe that all adverse stock price movements are likely to be due to

managerial misconduct. In this case, expected defense cost savings due to reduced incidence of frivolous litigation under the Reform Act may mean that firms with weak governance structures will be more positively affected by passage of the Reform Act (and more negatively affected by increased expectation of a veto). The net impact of the Reform Act for firms with different governance structures will depend on the relative importance of protection from fraudulent managers versus expected litigation defense costs. We use data on three variables—institutional ownership, insider ownership and board independence—to investigate the relation between governance structure and the market response to the Reform Act. Briefly, we find limited evidence that firms with less effective governance structures are more positively impacted by passage of the Act and more negatively impacted by increased expectation of its veto. This is consistent with the interpretation that the expectation of decreased litigation costs is the more prevalent factor in determining the overall market response.

A BRIEF OVERVIEW OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

The Reform Act makes a number of changes in previous securities litigation laws. In response to the four abuses identified by Congress, the Reform Act establishes a 'safe harbor' for forward-looking statements, a system of proportionate liability to reduce the targeting of 'deep pockets' defendants, a mandatory stay of discovery, and a series of procedural changes aimed at reducing the incidence of suits brought by 'token plaintiffs'. A brief summary of these provisions follows:

(1) The Reform Act provides protection from liability based on certain forward-looking statements, as long as those statements are accompanied by 'meaningful cautionary statements', identifying important factors that could cause actual results to differ materially from those in the forward-looking statement. In addition, whereas before the Reform Act cases were seldom dismissed because fraudulent intent could be alleged without specific evidence, now the complaint must provide facts to support the suggestion that the defendant made knowingly fraudulent statements.

(2) The Reform Act establishes a system of proportionate liability, where each defendant is only liable for the portion of the judgement that corresponds to the percentage of culpability of that defendant, as determined by the court. It also prohibits using securities fraud as a basis for a claim for treble damages under the Racketeer Influenced and Corrupt Organizations (RICO) Act.

(3) Absent extreme circumstances, the Reform Act requires a stay of discovery during a motion to dismiss; this removes the incentive for an innocent defendant to settle in order to avoid a costly discovery process.

(4) Instead of making the first party to file a suit the lead plaintiff in that class action, the Reform Act now requires the first filer to notify prospective class members that a claim has been filed and that they have the option of petitioning the court to be lead plaintiff, and it requires the court to appoint the 'most adequate plaintiff' (presumed to be the shareholder with the largest financial stake) to represent the class. In addition, it limits the number of times a particular plaintiff can serve as lead plaintiff, prohibits the payment of referral fees from attorneys to brokers for referral of potential class representatives, prohibits extra compensation to lead plaintiffs, and requires each prospective lead plaintiff to certify that they have read and authorized the complaint, and that they did not purchase the security at the direction of plaintiff's counsel or in order to participate in the class action.

POTENTIAL CONSEQUENCES OF THE LITIGATION REFORM ACT

An unresolved issue is the effect these reforms will have on firms subject to litigation, shareholders who are victims of fraud, and the economy as a whole. Opinions are divided among legislators, as well as the various groups affected by this legislation—lawyers, high-tech firms, and the investing public. The following is a description of the potentially positive and negative effects of the Reform Act drawn from several public sources and perspectives.

Potentially Positive Effects

First, the Reform Act may increase firm disclosures of pertinent information, thereby reducing the information asymmetry between managers and investors, and allowing investors to make better investment decisions. The pre-1995 threat of litigation had left corporations hesitant to increase their disclosure of earnings projections and other important investor-related information. A National Investor Relations Institute survey indicated that 'two thirds of the 383 corporate respondents said the fear of suits had made other companies less forthcoming and more than one third admitted to revealing less themselves'.[9] Mednick and Peck (1994) describe the testimony of three high-tech CEOs as confirming that this 'defensive posture' has taken hold in their industry. They cite the adoption of 'no communications' and 'limited guidance' policies by many Silicon Valley firms in which they disclose only information they are legally obligated to disclose, and they refuse to make earnings and revenue projections public. This defensive environment extends to start-up firms as well. Seventy-one percent of firms surveyed by the National Venture Capital Association (NVCA) reported that 'they were more reluctant to discuss company performance with analysts'.[10]

Second, the Reform Act may stop the losses of value from firms seeking to settle or defend themselves against unwarranted suits. As Mednick and Peck (1994) note, these diverted capital resources could be used to 'fuel innovation and job creation', and ultimately will adversely affect shareholders as they lower firm value.[11] The number of total cash settlements increased almost 300% from 1988 to 1992, while the average settlement increased 177% to $10.8 million.[12] These losses may be particularly costly for start-up and high growth companies; the NVCA survey indicated that one in six firms had been the subject of a lawsuit and these suits have required an average of 1055 management hours and $692 000 to defend.[13] Several CEOs, including EMC's Richard Egan, have testified regarding the impact of these costs on their businesses. Egan stated that:

> '…companies will not take sound risks but will manage their operations so as to maintain steady performance and avoid stock fluctuation …Management time will be diverted to defend these lawsuits and US corporations will remain at a disadvantage because you must constantly think short term in order to deliver acceptable financial results every 90 days, rather than focusing on long-term development, a disadvantage with which most of our foreign competitors do not have to contend.[14]

Third, the Reform Act may reduce firms' liability insurance costs and enable them to more easily fill outside director seats on their Board. Jean Head Sisco, the Chairperson of the National Association of Corporate Directors characterized the pre-Reform Act situation, in which outside directors were subject to personal liability when a firm was subject to a securities suit, as causing 'a crisis in corporate governance'.[15] The NVCA survey backs up this view reporting that 61% of the venture capital firms surveyed had experienced increases in liability insurance costs and 30% claimed to have difficulty retaining outside directors.[16] 'Furthermore, 60% of the members of the American Business Conference stated in response to a survey that the possibility of being sued has forced them to weigh more carefully the decision to join a board, 24% refuse to serve on boards of start-up firms and other companies that are especially vulnerable to securities fraud suits'.[17] Mednick and Peck (1994) claim that the effect of this 'crisis' will be highest in small, growth firms which rely on outside directors for expertise.

Finally, the Reform Act may increase the role of institutional investors, such as pension funds, in class action securities suits. This should decrease the incidence of frivolous suits and all the costs associated with them, since the institutional investors 'are more sophisticated, have more resources at their disposal, and have a much more significant stake, in both dollar and percentage terms, in the litigation than the typical individual class plaintiff has'.[18]

Potentially Negative Effects

First, the provisions of the Reform Act may raise the hurdle for filing class action securities suits and if, in so doing, it results in the curtailment of meritorious suits, then some amount of securities fraud will go undetected and unpunished. The primary source of this concern is the safe harbor provision for forward-looking statements in which the firm is not liable for projections if the defendant cannot prove that an executive officer

approved the projection with the knowledge that it was false. Snyder and Gonick (1993) argue that making it more difficult to bring meritorious cases could ultimately have an effect on the ability of firms to raise capital:

> 'A disingenuous and ill-considered attempt to protect the corporate world does more harm than good and may, in fact, bring about an economic disaster that would surpass the savings and loan fiasco. If there is a loss of public confidence in the nation's ability to provide private as well as public enforcement remedies as a deterrent against corporate misconduct, pension fund plan managers, along with other investors, will be reluctant to invest in the stock of both new and mature corporations. This would, in turn, result in a diminution in the ability of these companies to raise the capital needed for growth, expansion, or job creation'.[19]

This was the main objection of President Clinton who, in his veto message, claimed that the Reform Act would 'have the effect of closing the courthouse door on investors who have legitimate claims'. Clinton was lobbied heavily on this issue by state and local officials, and unions such as the Fraternal Order of Police.[20]

Second, by providing firms with a sense of insurance, the safe harbor provision for forward-looking statements may actually result in firms disclosing less accurate information. The incidence of disclosure may rise since there is now no penalty, but there is also no longer as large a cost to making an erroneously rosy forecast. Firms may find it easy to create 'meaningful cautionary statements' that will render them immune to liability for the projections they make.

Finally, the above mentioned positive effects on director liability insurance rates may be negated or reversed, because increased action by institutional investors may result in fewer cases but with larger damages, since they will be less willing to settle out of court.[21] Thus, the net impact could either increase or decrease aggregate settlement costs and, consequently, director liability insurance premiums.

THE LEGISLATIVE TIME LINE

As noted in the introduction, passage of the Reform Act was the result of a controversial 4-year legislative process. Usually this would imply that passage was anticipated well in advance of the final vote in Congress and the President's signature. This was, however, not the case. While passage of the legislation by the Senate on December 5 and by the House on December 6 almost certainly was anticipated, events following Congressional passage included a number of surprises.

President Clinton had initially claimed to be in support of the spirit of the bill but had not committed to support it.[22] Following Congressional passage of the bill, no clear statements were made by the President regarding the action he would ultimately take. On Friday, December 15, William Lerach, a nationally prominent plaintiff's attorney in securities fraud suits, and the Democratic party's third largest donor, had dinner at the White House. Mr. Lerach subsequently denied that he spoke to the President about the legislation, and, on Monday, December 18, Presidential Spokesperson Michael McCurry said that Clinton was still deciding whether or not to sign the legislation. Contrary to these indications, however, news reports indicate that congressional sources 'insisted that the president told staff Monday he had ''tentatively decided'' to veto the legislation'.[23] In addition, a December 19 editorial in the Washington Times indicated that 'Word has it that Mr. Clinton is reaching for the veto pen', and questioned the influence of Mr. Lerach at the previous Friday night's dinner.

President Clinton vetoed the legislation late on December 19, just hours before it would have become law without his signature. The House voted to override his veto on December 20 and, after 2 days of debate, the Senate followed suit and completed the override on December 22. This was the first veto override of the Clinton presidency and all of this activity occurred in the midst of heated budget talks between the Administration and Congress. Given overwhelming support for the bill in the House of Representatives (the initial vote in the House was 320 to 102), an override vote by the House in response to the President's veto seemed likely. The response of the Senate was, however, less predictable. The initial vote in the Senate was 65–30, one vote short of the 66 ultimately needed to complete the override.

DATA AND METHODOLOGY

Sample Selection

While we might expect a market-wide impact associated with passage of the Reform Act, we focus on four industries that are likely targets of class action lawsuits and, as such, are most likely to be affected.[24] Our sample consists of CRSP-listed firms in the biotechnology (SIC codes 2833–2836 and 8731–8734), computer (SIC codes 3570–3577 and 7370–7374), electronics (SIC codes 3600–3674), and retailing (SIC codes 5200–5961) industries. Francis *et al.* (1994) report that during their sample period, 1988–1992, firms in these four industries experienced relatively high levels of shareholder litigation brought under Rule 10b-5, or Section 11 of the federal securities laws. *Institutional Investor* reports that the odds of a technology firm being sued rose from less than one in ten prior to 1988, to approximately one in four in 1994.[25] This proliferation of class action lawsuits against high-technology firms followed a 1988 Supreme Court decision allowing significant fluctuations in a company's stock price to be taken as evidence of fraud. Industries with relatively large fluctuations in sales and earnings, as well as growth firms with a relatively high investment in research and development, are particularly likely to experience the significant stock price movements that make them susceptible to securities fraud litigation.

Additional sample selection criteria include the following: (1) The firm is trading as of December 22, 1995; (2) only ordinary common shares are traded; (3) the firm has only one class of common shares listed on CRSP; and, (4) the firm has sufficient returns to estimate market model parameters—we require at least 75 non-missing returns during the 150-day pre-event base period. The initial sample consists of 1514 firms. The Dow Jones News Retrieval Service was used to screen potential sample firms for confounding corporate events during the event period and 11 firms were eliminated. Of these, five went public during late December 1995, one was taken over in a tender offer that expired on December 21, and five made announcements regarding liquidations, the possibility of bankruptcy filings, or similar statements indicating extreme financial distress. Firms making the following types of announcements during the days surrounding December 20 were retained in the sample, but indicator variables were defined for each announcement type, so we could examine whether retaining these firms would impact our overall results: (1) earnings announcements, including managerial projections—44 firms; (2) announcements indicating that the firm might be the target of a merger or acquisition activity—2 firms; (3) litigation-related announcements, including filing or settlement of shareholder class actions or inter-corporate lawsuits—10 firms; (4) seasoned equity offering announcements—4 firms; (5) stock split and reverse split announcements—5 firms; (6) stock repurchase announcements—4 firms; (7) announcements of debt rating changes—3 firms; (8) significant loss write-off announcements—3 firms; (9) announcement of a private equity placement—1 firm; and, (10) announcements of executive resignation or death—3 firms. Additional announcements that were noted, but not specifically investigated included acquisition activity where the firm was the buyer, joint ventures and strategic alliances, sales of assets, debt or preferred stock financings, regular dividend announcements, change of listing announcements, product release announcements, contract awards, managerial and board of director appointments, and announcements regarding patents and results of clinical trials.

The resulting sample consists of 1485 firms—65 biotechnology firms, 554 computer firms, 450 electronics firms, and 416 retail firms. The CRSP tape is the source for the stock returns data, as well as the number of shares outstanding as of December 31, 1995. We also collected corporate governance characteristics from a variety of sources. The January, 1996 edition of the *S&P Stock Guide* was used to collect the number of institutional owners and the number of shares held by those institutions as of December 31, 1995. The December 31, 1995 edition of *CDA/Investnet Insider Holdings* was used to collect data on insider ownership.[26] We define total insider holdings for each firm as the sum of the current direct and indirect holdings listed with the following ownership codes: CB (chairman of the board), CP (controlling person), D (director), DO (director and beneficial owner), GP (general partner), H (officer, director and beneficial owner), LP (limited partner), O (officer), OB (officer and beneficial owner), OD (officer and director), OT (officer and trustee), OX (divisional officer), P (president), and VP (vice president).[27] The January, 1996 edition of *S&P Register of Corporations, Directors and Ex-*

Table 1. Descriptive Statistics on Corporate Governance Characteristics of the Sample

		Industry Subsets			
	Full Sample	Biotechnology	Computer	Retail	Electronics
Panel A: Institutional Ownership					
Sample Size	913	56	329	266	262
Number of Institutional Owners					
Mean	122	206	113	124	114
Median	52	45	54	55	49
Quartile1, Quartile3	24, 130				
Percentage Institutional Ownership					
Mean	41.6	31.2	42.4	43.3	40.4
Median	39.1	22.0	39.2	42.6	37.5
Quartile1, Quartile3	20.1, 63.0				
Panel B: Insider Ownership					
Sample Size	1414	61	525	393	435
Percentage Insider Ownership					
Mean	30.9	24.6	26.5	40.6	28.3
Median	19.1	8.4	17.6	26.4	16.8
Quartile1, Quartile3	6.8, 41.2				
Panel C: Board Structure					
Sample Size	1198	61	416	364	357
Number of Directors					
Mean	6.2	7.7	5.6	7.0	5.7
Median	6	7	5.5	7	5
Quartile1, Quartile3	4, 8				
Percentage Outside Directors					
Mean	58.3	64.2	57.1	59.9	57.0
Median	66.7	66.7	62.5	66.7	62.5
Quartile1, Quartile3	50.0, 77.8				

The sample includes all CRSP-listed firms in the biotechnology (SIC 2833–2836 and 8731–8734), computer (SIC 3570–3577 and 7370–7374), electronics (SIC 3600–3674), and retail (SIC 5200–5961) industries that meet the following criteria: (1) The firm is trading as of December 22, 1995; (2) only ordinary common shares are traded; (3) the firm has only one class of common shares listed on CRSP; and (4) there are sufficient returns available to estimate market model parameters.

ecutives was used to collect data on board structure. We collected the total number of directors and the number of outside directors for each firm. We defined as outside directors any board of directors members who were not identified as officers of the firm.[28]

Descriptive statistics for the governance variables are presented in Table 1. Institutional ownership is presented in panel A, insider ownership is in panel B, and board structure is in panel C. In each panel, the sample size is less than 1485 due to data availability limitations. Panel A shows that our institutional ownership measures were available for 913 of our 1485 sample firms. For this sample, the mean number of institutional owners is 122, with a median of 52. The number of institutional owners is similar across industry subsets, with individual industry medians ranging from 45 (in the biotechnology industry) to 55 (in the retail industry). The mean percentage institutional ownership (defined as the number of shares held by institutional investors as a percentage of the total number of shares outstanding as of December 31, 1995) is 41.6% for the full sample with a median of 39.1%. Looking across industries, the percentage institutional ownership is lower in the biotechnology industry than in the other three industries; the mean for the biotechnology industry is 31% compared with a weighted-average mean of 42% in the other three industries.

Panel B of Table 1 shows that insider ownership was available for 1414 of our sample firms and that the mean percentage insider ownership (defined as total insider holdings as a percentage of the total number of shares outstanding as of

December 31, 1995) is 30.9%. The median insider ownership for the full sample is 19.1%. Comparing industry subsets, the percentage insider ownership is highest in the retail industry. The mean percentage insider ownership in the retail industry is 41% compared with a weighted-average mean of 27% for the other three industries.

Finally, panel C shows that board structure information was available for 1198 of our sample firms. For this sample, the mean number of directors is 6.2 and the median number of directors is 6. The mean percentage of outside directors is 58.3% with a median of 66.7%. As expected, our data source slightly overstates the proportion of outside directors when compared with collecting that data from individual firm proxy statements. Our sample characteristics are, however, comparable to those reported by Johnson *et al.* (1997) who use proxy statement data. While their sample is not identical to ours, the combination of their computer and software industries is similar to our computer industry. Calculating weighted-average results for the 264 firms in their computer and software industries gives 6.4 as the mean number of directors, and 50.3% as the mean percentage of outside directors. For our computer industry, we find the mean number of directors is 5.6 and the mean percentage outside directors is 57.1%. Their drug industry is similar to our biotechnology industry and they report mean values of 7.4 directors, with 48% of them outside directors for this industry. Our results show a mean of 7.7 directors with 64% of them outside directors.

Methodology

Because we are interested in measuring short-run abnormal stock returns, we use event study methodology and cumulative abnormal returns to determine the response of our sample portfolio around important dates in the legislative history of the Reform Act. To check for leakage of information and to examine events leading up to the Presidential veto and subsequent override votes, we define the event period as the 22 trading days from November 22 (20 trading days before the veto) through December 22, 1995 (the day of the Senate veto override).

We construct an equally-weighted portfolio of all of our sample firms. Because this is a calendar time event study, we compute portfolio abnormal returns rather than averaging individual-firm abnormal returns to account for the cross-sectional dependence in the abnormal returns of the individual firms in our sample. Abnormal returns are estimated over a pre-event control period using the following form:

$$R_{pt} = \alpha_p + \beta_p R_{mt} + \varepsilon_{pt} \tag{1}$$

where R_{pt} is the return on our equally-weighted sample portfolio at time t; R_{mt} is the return on the S&P 500 index at time t; α_p and β_p are parameters of the estimated relation between the returns of the sample portfolio and the market proxy returns; and ε_{pt} is the error of the fitted relation at time t. The error term is assumed to have the usual properties and the parameters are assumed to be stable over the control and event periods.

We estimate the model using ordinary least squares regression over a 150-trading day period prior to the event period. The estimated parameters are used to compute expected returns during the event period and expected returns are subtracted from actual returns to determine abnormal returns:

$$AR_{pt} = R_{pt} - \alpha_p - \beta_p R_{mt} \tag{2}$$

Significance of the portfolio abnormal returns are assessed using the following z-statistic:

$$Z_t = \frac{AR_{pt}}{\sqrt{\dfrac{\sum_{t=-150}^{-1} (AR_{pt})^2}{149}}} \tag{3}$$

Because firms in the four industries may be differentially impacted by passage of the Litigation Reform Act, we also examine the stock price response on an industry-by-industry basis. To do this, we construct four equally-weighted industry portfolios consisting of all the firms in a given industry. We expect a differential response because firms in the computing industry are especially likely targets of class action litigation. Forty-six percent of the firms in the Francis *et al.* (1994) study are in computer-related industries. In fact, according to a survey by the American Electronics Association, 53% of Silicon Valley firms have been sued, including all of the top ten.

We are also interested in testing whether firms with particular corporate governance structures are affected differentially. Romano (1991) suggests that class action litigation may substitute for other governance structures that monitor management. She predicts that firms' governance struc-

tures may impact the probability that they become lawsuit targets because '…a weakness in one institution's *ex ante* monitoring ability could lead to misconduct necessitating litigation as an *ex post* settling-up mechanism' (p. 56).[29] In particular, Romano (1991) predicts that firms with insider-dominated boards and those lacking an outside block owner will be more likely litigation targets, while firms with greater managerial stock ownership will be less likely litigation targets since the interests of management and shareholders are more closely aligned in these firms. This implies that shareholders of firms with poor governance structures benefit more from legal remedies for fraudulent behavior. Since the Reform Act makes all class action securities litigation harder to bring and to successfully prosecute, Romano's argument predicts that these firms will experience a less positive, or more negative, response to the passage of the Reform Act and a more positive, or less negative, response to the Presidential veto.

While Romano's argument focuses on the incidence of meritorious litigation and its relation to a firm's *ex ante* monitoring structure, the Reform Act makes all suits, frivolous as well as meritorious ones, harder to bring and to win. We must, therefore, also consider the incidence of frivolous suits when analyzing the relation between governance structure and the value of security litigation reform. In addition to their susceptibility to meritorious litigation, firms with poor monitoring structures are also more likely to be the target of frivolous suits. This is because the lack of monitoring in these firms will cause investors to believe that adverse stock price movements are more likely to be due to misconduct. The expected costs of defending the firm against such suits will, therefore, be higher for these firms. Since the Reform Act is expected to decrease the incidence of all suits, firms with poor monitoring structures will realize higher than average benefits from its passage, via the expected value of defense cost savings. Therefore, conditional on the overall response to the bill, these firms may experience a more positive, or less negative, market response to passage of the Reform Act and a more negative, or less positive, response to the Presidential veto.

The empirical relation between governance structure and the market response to the Reform Act will depend on the value that market participants place on protection from fraudulent managers, relative to the size of the cost savings derived from less litigation. To examine this relation, we form equally-weighted subset portfolios based on each firms' level of institutional ownership, level of insider ownership, and proportion of outside directors. If the projected losses due to fraudulent managerial disclosures are greater than the expected litigation cost savings, then we expect to see the portfolio of firms with poor governance structure experience a less negative (or more positive) market response to the veto, and less positive (or more negative) response to passage of the Reform Act. If, on the other hand, expected litigation cost savings are more valuable than protection from fraudulent managers, we would expect the firms with poor governance structures to experience a more negative (or less positive) market response to the veto and a more positive (or less negative) response to the override. A comparison of the abnormal returns surrounding the veto and the subsequent House override for portfolios of firms with differential governance characteristics will provide evidence on the value market participants place on protection from fraudulent managers relative to cost savings derived from less litigation.

EMPIRICAL RESULTS AND ANALYSIS

Event Study Results

Table 2 presents the abnormal returns for an equally-weighted portfolio of all sample firms and for equally-weighted industry subset portfolios.[30] The one-month event window in Table 2 begins 8 trading days before Congressional passage of the bill on December 5th and 6th, and goes through the Presidential veto on December 19 to the Congressional override votes on December 20th and 22nd. The full sample shows insignificant abnormal returns associated with initial passage of the bill. In addition, abnormal returns are significant on only 1 day during the entire period leading up to passage of the bill and following its passage, but prior to the Clinton veto. The lack of significant abnormal returns during this period indicates that passage of the bill was expected, and that there were no other significant events during that window to suggest a change in expectations regarding the ultimate fate of the bill.

In contrast, there was a significant market response to rumors of the presidential veto. The full sample portfolio and all of the industry subset

Table 2. Abnormal Returns around the 1995 Private Securities Litigation Reform Act

Event Day	Calendar Date	Full Sample ($n = 1485$)	Industry Subset Portfolios			
			Biotechnology ($n = 65$)	Computer ($n = 554$)	Retail ($n = 416$)	Electronics ($n = 450$)
1	11/22	0.58	0.79	0.48	0.31	0.92
2	11/24	0.15	−1.10	0.36	0.36	−0.13
3	11/27	−0.64	0.31	−0.94	−0.60	−0.45
4	11/28	0.14	−0.03	0.50	−0.51	0.32
5	11/29	0.62	−0.77	0.83	0.44	0.71
6	11/30	0.99*	0.60	1.28*	0.30	1.35**
7	12/1	0.13	−0.00	0.70	−0.10	−0.36
8	12/4	−0.36	−0.14	−0.14	−0.67	−0.39
9	12/5	−0.80	0.43	−0.83	−0.48	−1.25*
10	12/6	−0.78	−0.35	−0.99	−0.49	−0.87
11	12/7	−0.08	0.70	−0.11	−0.20	−0.03
12	12/8	0.21	0.26	0.23	−0.03	0.40
13	12/11	−0.86	−1.09	−0.77	−1.19**	−0.66
14	12/12	−0.61	−0.49	−0.55	−0.42	−0.89
15	12/13	−0.01	0.42	−0.09	0.06	−0.04
16	12/14	−0.08	−0.82	−0.04	0.15	−0.24
17	12/15	−0.72	0.16	−0.96	0.05	−1.28*
18	12/18	−2.01**	−2.94**	−2.89**	−1.19**	−1.54**
19	12/19	0.35	0.17	0.77	−0.37	0.50
20	12/20	1.37**	0.62	1.71**	1.13**	1.28*
21	12/21	−0.02	1.15*	0.07	−0.32	−0.03
22	12/22	0.48	0.23	0.79	0.52	0.11

* Significantly different from zero at the 10% level.
** Significantly different from zero at the 5% level.
Daily portfolio abnormal returns (AR_{pt}), expressed as percentages, for the days surrounding the initial passage (December 5 in the Senate and December 6 in the House), rumored presidential veto (December 18) and subsequent veto override votes (December 20 in the House and December 22 in the Senate) on the Reform Act. $AR_{pt} = R_{pt} - \alpha_p - \beta_p R_{mt}$, where R_{pt} is the return on the equally-weighted sample portfolio on day t, R_{mt} is the return on the S&P 500 index on day t, and α_p, β_p are OLS regression parameters computed for the portfolio over a 150-trading day pre-event base period.

portfolios exhibit significantly negative abnormal returns on Monday, December 18. The full sample portfolio shows an abnormal return of −2% that day, with individual industry abnormal returns ranging from −1.19% (for the retail industry) to −2.94% (for the computer industry). This sample-wide negative response can be attributed to widespread speculation that President Clinton would veto the bill. Although the veto did not occur until after the market closed on Tuesday, December 19, there was extensive speculation in the press on Monday that a veto was imminent. News stories on that day reported Mr. Lerach's Friday night dinner at the White House and the subsequent rumor that the president had 'tentatively decided' to veto the bill.

The negative response to the rumored veto was followed by a significantly positive market response to the override of the veto.[31] The full sample portfolio and three of the four industry portfolios exhibit significantly positive abnormal returns on December 20, the date of the House override vote. The full sample portfolio shows an abnormal return of 1.37% that day, with individual industry abnormal returns ranging from 0.62% (for biotechnology firms) to 1.71% (for the computer industry). Interestingly, biotechnology firms exhibit a significantly positive abnormal return of 1.15% on December 21, the day after the House override vote. A search for news relevant to the biotechnology industry but unrelated to the legislative activity uncovered only isolated firm-specific news items; no events that could have caused an industry-wide rally. Therefore, we conclude that the positive abnormal return in the biotechnology industry on the 21st was a delayed response to the increased likelihood of the passage of the Reform Act.

Taken together, the negative response to the expected veto and the positive response to the House override suggest that market participants viewed the Reform Act as enhancing the value of

firms that are likely targets of class action securities litigation. If passage of the legislation was fully anticipated prior to the time period examined in Table 2, then any permanent increase in firm values due to the Act would already be reflected in security prices as of late November. It is only when subsequent events significantly changed the probability of passage that we would expect to see a stock price reaction in the affected firms. Since the two events (veto and override vote) are offsetting with respect to their impact on the probability that the bill would eventually become law, we would expect the net market reaction to the two events to be zero. The fact that the positive reaction to the House override vote is not of the same magnitude as the negative reaction to the veto suggests that investors did not completely anticipate the Senate override that followed. The pattern of abnormal returns following the veto rumor suggests that the market was responding positively to the increased probability of a successful override vote with the major part of the reaction in response to the outcome of the House vote and with an additional positive (but insignificant) reaction on the date of the Senate vote.

The fact that the same response is seen in all four industries further strengthens the inference that, for the average firm, the positive aspects of the bill (e.g. litigation defense cost savings, more disclosure of pertinent information, and an increased ability to retain outside directors) outweigh the potential for less accurate disclosure, or the inability of investors to receive proper redress on meritorious suits. In addition, the greater magnitudes of the abnormal returns for the biotechnology and computer industry portfolios is consistent with the volatile nature of stock prices (biotechnology), and the relatively high level of litigation activity (computer) that make them more susceptible to fraud claims. For these two industries, the cost savings that will result from less litigation under the Reform Act are larger than in the other industries which makes the passage of the act a more positive event.

The Impact of Governance Structure

The stock market reactions documented in the previous section lead us to conclude that, for the average firm, the overall benefits of the Reform Act outweigh its costs. There is, however, an implied tradeoff between benefits, such as cost savings from reduced incidence of litigation, and costs, such as lost protection from fraudulent managers, and the nature of that tradeoff may be different for different types of firms. Comparing abnormal returns across portfolios formed on the basis of governance structure allows us to more closely examine the relative importance of cost savings from reduced litigation, and the cost of lost protection from fraudulent managerial disclosures. If the projected losses due to fraudulent managerial disclosures are the more important factor, then we expect firms with poor governance structures to experience a less negative response to the veto and a less positive response to passage of the Reform Act. If, on the other hand, expected litigation cost savings are the more important factor, then we expect firms with poor governance structures to experience a more negative response to the veto and a more positive response to the override.

The abnormal returns for the two significant events—the veto rumor on December 18 and the House override vote on December 20—are reported for portfolios formed on the basis of governance structure in Tables 3–5. Portfolios are formed on the basis of institutional ownership in Table 3, on the basis of board structure in Table 4, and on the basis of insider ownership in Table 5. Even though data availability constrains the full sample size in each of these tables to be less than the full sample in Table 2, the resulting samples do not appear to be biased. In each of the following tables, the abnormal returns for each industry subset and for the combined sample are qualitatively identical to those reported in Table 2 for the full sample.

We present results in Table 3 using portfolios based on the percentage institutional ownership (panel A) and on the number of institutional owners (panel B). For each measure of institutional ownership, we divide the sample into three groups based on the sample-wide distribution of the relevant characteristic. The Low group consists of firms with institutional ownership below the 25th percentile, the Medium group consists of firms between the 25th and 75th percentile, and included in the High group are firms above the 75th percentile. Using either percentage institutional ownership or the number of institutional owners as our measure of governance structure, the results show that firms with weak governance structures (the Low group) experience a more

Table 3. Abnormal Returns Categorized by the Level of Institutional Ownership

Date	Institutional Ownership Category	Full Sample ($n = 913$)	Industry Subset Portfolios			
			Biotechnology ($n = 56$)	Computer ($n = 329$)	Retail ($n = 266$)	Electronics ($n = 262$)
Panel A: Percentage Institutional Ownership						
12/18	Low	−2.59**	−2.57**	−3.58**	−1.57**	−2.24**
	Medium	−1.83**	−2.60**	−2.41**	−1.25**	−1.59*
	High	−1.22	−0.01	−2.15**	−1.01*	−0.41
12/20	Low	0.77	0.33	0.38	1.07	1.12
	Medium	2.07**	0.56	2.71**	1.16**	2.60**
	High	0.97	−1.32*	1.39	0.75	0.94
Panel B: Number of Institutional Owners						
12/18	Low	−2.11**	−2.62**	−2.96**	−0.93	−2.01**
	Medium	−2.27**	−2.83**	−2.76**	−1.78**	−1.99**
	High	−0.84	−0.79	−1.95**	−0.60	0.31
12/20	Low	1.07*	−0.37	2.19**	0.73	0.66
	Medium	2.07**	0.58	2.14**	1.39**	2.96**
	High	0.67	0.33	0.83	0.67	0.56

* Significantly different from zero at the 10% level.
** Significantly different from zero at the 5% level.
Percentage institutional ownership is the number of shares held by institutions (as reported in the January 1996 edition of the *S&P Stock Guide*) divided by the 1995 year-end number of shares outstanding (reported by CRSP). Number of institutional owners is also taken from the January 1996 edition of the *S&P Stock Guide*. Daily portfolio abnormal returns (AR_{pt}), expressed as percentages, for the rumored presidential veto (December 18) and subsequent House override vote (December 20). $AR_{pt} = R_{pt} - \alpha_p - \beta_p R_{mt}$, where R_{pt} is the return on the equally-weighted sample portfolio on day t, R_{mt} is the return on the S&P 500 index on day t, and α_p, β_p are OLS regression parameters computed for the portfolio over a 150-trading day pre-event base period. Institutional ownership categories are defined based on the full sample distribution of the relevant characteristic, where the Low category consists of firms below the 25th percentile, the Medium category consists of firms between the 25th and 75th percentiles, and the High category consists of firms above the 75th percentile.

Table 4. Abnormal Returns Categorized by the Degree of Board Independence

Date	Fraction Outside Directors	Full Sample ($n = 1198$)	Industry Subset Portfolios			
			Biotechnology ($n = 61$)	Computer ($n = 416$)	Retail ($n = 364$)	Electronics ($n = 357$)
Panel A: Categorized by whether a majority are outside directors						
12/18	$<1/2$	−1.68**	−3.43**	−2.50**	−1.18*	−1.11
	$\geq 1/2$	−1.74**	−2.33**	−2.58**	−1.06**	−1.35*
12/20	$<1/2$	1.28**	0.33	1.32	0.58	1.93**
	$\geq 1/2$	1.54**	0.16	2.10**	1.61**	1.05
Panel B: Categorized by whether at least 2/3 are outside directors						
12/18	$<2/3$	−1.79**	−2.48**	−2.85**	−1.14**	−1.06
	$\geq 2/3$	−1.66**	−2.53**	−2.24**	−1.04**	−1.51*
12/20	$<2/3$	1.29**	0.40	1.26**	1.55**	1.20
	$\geq 2/3$	1.68**	0.04	2.67**	1.24**	1.38*

* Significantly different from zero at the 10% level.
** Significantly different from zero at the 5% level.
The number of board member and the number of outside directors for each firm are reported in the January 1996 edition of *S&P Register of Corporations, Directors and Executives*. We defined as outside directors any board of directors members who were not identified as officers of the firm.
Daily portfolio abnormal returns (AR_{pt}), expressed as percentages, for the rumored presidential veto (December 18) and subsequent House override vote (December 20). $AR_{pt} = R_{pt} - \alpha_p - \beta_p R_{mt}$, where R_{pt} is the return on the equally-weighted sample portfolio on day t, R_{mt} is the return on the S&P 500 index on day t, and α_p, β_p are OLS regression parameters computed for the portfolio over a 150-trading day pre-event base period. In Panel A, the board structure categories are defined based on whether a majority of the firm's directors are outside directors. In Panel B, the board structure categories are defined based on whether the firm has a larger fraction of outside directors than the full sample median of 2/3.

negative response to the expected veto than do firms with strong governance structures (the High group). While this result holds for the full sample and all of the industry subsamples, these differences are generally not statistically significant. The exception is the biotechnology industry in Panel A; in this case, the −2.57% abnormal return for the Low group is significantly more negative than the −0.01% abnormal return for the high group at the 5% level.

While not a strong statistical result, the relative magnitude of abnormal returns in the Low versus High institutional ownership portfolios indicates that the cost savings expected with passage of the Reform Act are more valuable to investors than the risk of being unable to easily pursue meritorious suits. Also consistent with this idea is the larger magnitude of the response in the computer industry: −3.58% in panel A versus a weighted average of −1.97% for the other three industries, and −2.96% in panel B versus a weighted average of −1.57% for the other three industries. The higher incidence of suits implies higher cost savings to this industry. Notice also that biotechnology firms, with their more volatile stock prices, also experience a stronger response than retail and electronics firms. Again this is consistent with an increased incidence of suits and higher cost savings.

The results are more mixed when comparing abnormal returns for the Low versus High institutional ownership portfolios on December 20th, the day of the House override. While there are several cases where the firms with low institutional ownership experience more positive abnormal returns that day than firms with high institutional ownership (as predicted if cost savings due to reduced litigation are the driving factor), none of the differences are statistically significant. In addition, the relation is clearly not monotonic across levels of institutional ownership, as the most positive response is generally seen in the Medium institutional ownership category.

In Table 4, we present results for portfolios formed on the basis of the percentage of outside directors. Our board structure data consists of observations of the number of inside and outside directors for each firm. We used two different rules to categorize firms into weak and strong governance groups. In panel A, we sort firms into portfolios based on whether at least half of their

Table 5. Abnormal Returns Categorized by the Level of Insider Ownership

Date	Insider Ownership Category	Full Sample ($n = 1414$)	Industry Subset Portfolios			
			Biotechnology ($n = 61$)	Computer ($n = 525$)	Retail ($n = 393$)	Electronics ($n = 435$)
12/18	Low	−1.59**	−1.15	−1.90**	−1.35**	−1.52*
	Medium	−2.19**	−5.05**	−3.12**	−1.22**	−1.54*
	High	−1.94**	−3.14**	−2.88**	−1.24**	−1.41
12/20	Low	2.00**	−0.52	3.36**	1.30**	1.57*
	Medium	1.24*	1.54	1.45*	1.69**	0.60
	High	1.03*	0.42	0.92	0.25	2.57**

* Significantly different from zero at the 10% level.
** Significantly different from zero at the 5% level.
Percentage insider ownership is the total number of shares held by insiders (as reported in the December 31, 1995 edition of *CDA/Investnet Insider Holdings*) divided by the 1995 year-end number of shares outstanding (reported by CRSP). We define total shares held by insiders as the sum of the current direct and indirect holdings listed for the following ownership categories: chairman of the board, controlling person, director, director and beneficial owner, general partner, officer, director and beneficial owner, limited partner, officer, officer and beneficial owner, officer and director, officer and trustee, divisional officer, president, or vice president.
Daily portfolio abnormal returns (AR_{pt}), expressed as percentages, for the rumored presidential veto (December 18) and subsequent House override vote (December 20). $AR_{pt} = R_{pt} - \alpha_p - \beta_p R_{mt}$, where R_{pt} is the return on the equally-weighted sample portfolio on day t, R_{mt} is the return on the S&P 500 index on day t, and α_p, β_p are OLS regression parameters computed for the portfolio over a 150-trading day pre-event base period. The insider ownership categories are defined based on the full sample distribution of the percentage insider ownership, where the Low category consists of firms below the 25th percentile, the Medium category consists of firms between the 25th and 75th percentiles, and the High category consists of firms above the 75th percentile.

directors are outsiders. In panel B, we use a two-thirds outside director cutoff; this measure effectively sorts the data into two equally-sized groups, since two-thirds is the median percentage of outside directors in our sample. Comparing abnormal returns across these portfolios, we see no consistent pattern in either panel and no statistical differences in abnormal returns.[32] One reason for this lack of significance may be related to the impact the Reform Act will have on the recruitment and retention of outside directors. As discussed earlier, the limited liability provisions of the Reform Act would likely make it easier for firms to attract and retain outside directors. This effect is more important for firms with predominantly outside boards and will increase the magnitude of the negative response to the Presidential veto. These results are therefore, not inconsistent with our findings from Table 3, but rather suggest a more complicated interplay between board structure and the likely impact of the Reform Act.

In Table 5, portfolios are formed on the basis of the percentage of insider ownership. As in Table 3, the cutoffs for the low, medium and high portfolios are made on the basis of the 25th and 75th ownership percentiles in the full sample. We find no consistent results across the full sample and industry subsets. The only statistically significant difference between portfolios with Low versus High insider ownership is the computer industry result for December 20. In this case, firms with low insider ownership experience a significantly more positive response to the House override vote, which is consistent with our prior results suggesting that cost savings from reduced litigation are more important than potential losses from fraudulent managerial disclosures. This reaction to the override vote in the computer industry is not, however, matched by a more negative response by low insider ownership firms to the veto. If there is any pattern at all on December 18, it is a u-shaped one in which firms in the most sensitive industries (biotechnology and computers) with a medium level of insider ownership are the most negatively affected by the veto. This finding cannot be explained by our previous arguments concerning governance structure, cost savings and protection from fradulent managers. The lack of consistency between our institutional ownership results and these insider ownership results may be attributed to limitations in our insider ownership data. As discussed in the data description section, the insider holdings data reported by CDA/Investnet are not always current and there

is some chance of double counting particular holdings that are reported both as direct and indirect holdings.

Taken together, our results in Tables 3–5 suggest that governance structure is clearly not a simple substitute for legal remedies such as those that are modified by the Reform Act. This is due both to the complexities of the Reform Act—its varying provisions and their differing impacts on firms—and to the complex nature of the governance process within firms. Our results indicate that while firms with different governance structures may face different monitoring environments, these differences are not a major factor in determining the perceived costs and benefits of litigation reform. The cost savings of lessened litigation under the Reform Act apparently outweigh any concern that investors may have about an increased ability for managerial fraud, even in the case of firms with weak monitoring environments.

POST-REFORM ACT SECURITIES LITIGATION AND FIRM DISCLOSURE

The results of our study clearly indicate that at the time of the veto and subsequent passage of the Reform Act, the market believed that its potentially positive consequences—including increased disclosure of forward-looking information, decreased costs due to reduced incidence of frivolous litigation, and an increased role for institutional investors as lead plaintiffs—outweighed its potentially negative consequences—including increased losses due to fraudulent managerial behavior and less accurate disclosures of forward-looking information. It remains unanswered whether the market's expectations at that time will ultimately be realized in differential litigation rates and outcomes, differential disclosure behavior by firms, or changes in the behavior of institutional investors following passage of the Act. While it may be too soon to draw definitive conclusions regarding these questions, a number of recent studies do provide a preliminary characterization of these issues.

Grundfest and Perino (1997) address the question of whether the rate of class action securities litigation has fallen following the Reform Act. They report that in 1996, litigation rates in the federal courts declined by approximately 30%; however, about 26% of the typical federal court activity moved to state courts in 1996, leaving the overall litigation rate essentially unchanged. They also report a change in the nature of the suits filed. Lawsuits filed in 1996 contain a much higher proportion of claims of accounting irregularities or trading by insiders than before the Act, while pure 'false forecast' cases make up a much smaller percentage of outstanding cases. In addition, Grundfest and Perino (1997) report that litigation typically follows larger price declines than before the Reform Act. While this evidence suggests that the standards for bringing litigation in federal court were raised by the Reform Act, the ability of plaintiffs to bring parallel or stand-alone cases in state courts allows them to avoid the stays of discovery mandated by the legislation and may actually lead to higher overall litigation costs for target firms. Congress is currently addressing this apparent 'loophole' in the Reform Act; since May 1997, three bills have been introduced that would require all class action suits against nationally-traded firms to take place in federal courts.

A related question is whether the disclosure behavior of firms has changed as a result of this legislation. While promoting increased disclosure of forward-looking information was a stated goal of legislators in drafting the Reform Act, opponents argued that the safe harbor provision would give managers an incentive to make less accurate disclosures. The SEC's Chairman Levitt recently reported that the safe harbor provision has not induced companies to disclose more forward-looking information. Consistent with this, Johnson *et al.* (1997) report no significant change in the number of firms in the computing and pharmaceutical industries providing forecasts in the eight quarters following the Reform Act. They do report, however, that the number of forecasts issued per firm has increased, and that the accuracy of those forecasts has decreased for firms that were making forecasts before the Reform Act. The impact of the Reform Act on firms' disclosure policies may not be answered for quite some time due to the above mentioned shifting of venue to the state courts and the lack of precedence in the federal courts with respect to the use of a safe-harbor defense.

Finally, on the issue of whether institutional investors have taken a more active role as lead plaintiffs following passage of this legislation, Grundfest and Perino (1997) report that the only post-Reform Act filings regarding the assignment

of lead plaintiff status have not involved institutions, as desired by Congress, but have rather involved competing groups of individual plaintiffs. Thus it appears, at least so far, that institutional investors are unwilling to take on the additional costs and responsibilities of lead plaintiff status.

SUMMARY AND CONCLUSIONS

While the Private Securities Litigation Reform Act of 1995 was the subject of much debate, the stock market spoke with a singular voice in support of its passage during the events of December 1995. Our results indicate that investors highly valued the positive aspects of the Reform Act including cost savings from a decreased incidence of litigation, an increased ability to attract and retain outside directors, and the possibility of increased disclosure by firm managers. In fact, the market's negative response to the Clinton veto and positive response to the House override indicate that these positive factors outweigh any increased susceptibility to managerial fraud or inability to bring meritorious suits. Our findings using portfolios based on corporate governance structure support these conclusions as well and suggest that the informational environment of a firm is too complicated to allow governance characteristics, like board structure and institutional ownership, to perform as substitutes for legislative remedies, such as class action securities litigation.

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NOTES

1. See Avery (1996).
2. In testimony before the Committee on Energy and Commerce, Subcommittee on Telecommunication and Finance, 103d Cong., 2d Sess. (1994).
3. Pub. L. No. 104-67, 104th Cong., 1st Sess.
4. Olson *et al.* (1996) citing the Conference Report—H.R. Rep. No. 369, 104th Cong., 1st Sess, 31 (1995), reprinted in 1996 U.S.C.C.A.N. 730 (p. 1103).
5. Johnson *et al.* (1997) also examine stock market reactions of selected industries to events in the legislative history of the 1995 Private Securities Litigation Reform Act.
6. See Schwert (1981) and Binder (1985) for a complete discussion of the difficulties of using financial data to measure the impact of regulation on shareholder wealth.
7. Avery's comprehensive article uses the description 'long and winding road' to describe the path to passage of the Reform Act.
8. Section 3 of the paper details these conflicting issues and identifies the key constituencies on either side of the Reform Act.
9. Waroff (1994). *Institutional Investor*.
10. Bowers and Gupta (1994). *The Wall Street Journal*, March 9, pg. B-1.
11. This claim is supported by Cross *et al.* (1989) who present empirical evidence of stock price declines in response to announcements of shareholder class action suits.
12. Bowers and Gupta (1994). *The Wall Street Journal*, March 9, pg. B-1.
13. Ibid.
14. In testimony before the Committee on Banking, Housing and Urban Affairs, Sub-committee on Securities, 102d Cong., 2d Session (1993).
15. Mednick and Peck (1994), pg. 911.
16. Bowers and Gupta (1994). *The Wall Street Journal*, March 9, pg. B-1.
17. John Adler, in testimony before the Committee on Banking, Housing, and Urban Affairs, Subcommittee on Securities, 102d Cong., 2d Session (1993).
18. Olson *et al.* (1996), pg. 1144.
19. Snyder and Gonick (1993), pg. 146.
20. *San Francisco Examiner*, December 21, 1995.
21. Sclafane (1996). *National Underwriter*, September 16.
22. Frisby and Taylor, *The Wall Street Journal*, December 12, 1995, pg. A-3.
23. *National Journal's Congress Daily*, Monday December 18, 1995.
24. When testing for the impact of regulation that affects the entire market, it may be necessary to examine subsets of firms that are expected to be differentially affected (Mitchell and Netter, 1989).
25. Waroff (1994). *Institutional Investor*.
26. CDA/Investnet is a semiannual catalog of all insiders owning 1000 shares or more as recorded in SEC filings of Forms 3, 4 and 5.
27. There are some limitations to this data. Because insiders are not required to update their current holdings annually, only to report non-exempt transactions which exceed $10 000, the date of the 'current' holdings may be several years old. CDA/Investnet reports that current holdings not confirmed by a later filing during the past 5 years are deleted. In addition, it is sometimes difficult to confirm that holdings have not been 'double counted' as both direct and indirect.
28. This definition may overstate the number of outside directors since non-officers of the firm may have other affiliations to the firm such as consulting arrangements, past employment history, or interlocking directorships.

29. Beasley (1996) and Dechow *et al*. (1996) provide empirical evidence to support this claim by showing that firms with weak monitoring structures are more likely to engage in fraudulent activity.
30. Eliminating firms with confounding announcements during the event period gives results (for the full sample and for all four industry subsets) that are qualitatively identical to those presented in Table 2, so they are are not reported here.
31. This is consistent with Johnson *et al*. (1997). While they did not examine the date of the rumored veto, they do report a significantly positive market response in a 3-day window around the date of the House override vote.
32. This result is also consistent with Johnson *et al*. (1997) who do not find statistically significant differences in the market response to the House override vote as a function of the proportion of outside directors.

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