

# A Lobbying Approach to Evaluating the Sarbanes-Oxley Act of 2002\*

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## **Abstract**

We evaluate the impact of the Sarbanes-Oxley Act (SOX) on shareholders by studying the lobbying behavior of investors and corporate insiders in order to affect the final implemented rules under the Act. Investors lobbied overwhelmingly in favor of strict implementation of SOX, while corporate insiders and business groups lobbied against strict implementation. We identify firms most affected by the law as those whose insiders lobbied against strict implementation. Such firms appear to be characterized by agency problems, rather than motivated by concerns over compliance costs. Cumulative stock returns during the five and a half months leading up to SOX passage were approximately 7 percent higher for corporations whose insiders lobbied against SOX disclosure-related provisions than for similar non-lobbying firms, consistent with an expectation that SOX would reduce agency problems. Analysis of returns in the post-passage implementation period suggests that investors' positive expectations with regards to the effects of these provisions were warranted.

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Following the Enron/Arthur Andersen scandal in late 2001, the U.S. Congress came under increasing pressure to pass legislation that would make it more difficult and costly for corporate insiders to misrepresent company performance and divert resources for personal gain. Bills were introduced in the House by Representative Michael Oxley on February 13, 2002, and in the Senate by Senator Paul Sarbanes on May 8, 2002. The final bill, the Sarbanes-Oxley Act of 2002, was passed in the House and Senate on July 25, 2002.

There are two main competing views about the likely impact of the Sarbanes-Oxley Act (SOX) on shareholders. Proponents of the Act argue that it will lead to improved disclosure, transparency and corporate governance, thereby reducing misconduct, perquisite consumption and mismanagement by insiders (whether legal or illegal), and that these benefits will outweigh the costs of compliance. Opponents argue that SOX will be ineffective in preventing corporate wrong-doing and/or that any benefits of SOX will not be large enough to outweigh the associated compliance costs.

The central challenge to distinguishing between these two views regarding the effect of SOX is the lack of a control group of publicly traded firms unaffected by the legislation. In this paper, we employ two approaches in an attempt to circumvent the lack of a control group. Our methodology stems from the procedural process used to implement the SOX legislation. Following the passage of SOX in 2002, Congress delegated the drafting and implementation of the principles outlined by SOX to the Securities and Exchange Commission (SEC). The various sections of SOX were divided into separate rules by the SEC, which then solicited public comments regarding the proposed rules, prior to adopting the final releases. Letters to the SEC commenting on the proposed rules were publicly available on the SEC website or through its public reference office.

Following the main compliance-related titles of SOX, we classify the rules on which the SEC solicited comments into groups. We focus on three major sets of rules: provisions related to enhanced financial disclosure (including the much-discussed Section 404 assessment of internal controls), provisions related to corporate responsibility, and provisions related to auditor independence. Our first approach in evaluating the effect of SOX on shareholder value is to classify the nature of the comment letters submitted to the SEC by individual investors and investor groups. We document that individual investors, based on their letters to the SEC, were overwhelmingly in favor of strict implementation of SOX. Significantly, lobbying by investor groups such as pension funds and labor unions, who presumably are more sophisticated than individual shareholders, was equally supportive. These findings allow us to speak to the perceived value of SOX for shareholders. To the extent

that investors were sufficiently informed and sufficiently sophisticated to evaluate the costs and benefits of SOX, these findings suggest that SOX was perceived as beneficial to individual investors and investor groups. This result stands in stark contradiction to the conclusions of studies such as Zhang [2007], who studies the price movement of the market as a whole after the passage of SOX and argues that shareholder reactions to SOX were unfavorable.

To provide additional evidence on the value of SOX, our second approach utilizes the comment letters sent to the SEC by and on behalf of corporate insiders. Our reading of these letters reveals that an overwhelming majority of insiders in lobbying companies opposed strict implementation of SOX and argued strongly for delays, exemptions and loopholes in its implementation. While lobbying by investors in favor of SOX is useful for distinguishing between the improved disclosure and corporate governance view and the costly compliance view of SOX, lobbying by insiders against strict implementation in and of itself is not directly informative for this purpose. Corporate insiders may lobby against strict implementation of SOX if it was expected to succeed in improving disclosure and governance or if the dominant effect of SOX was expected to be its high compliance costs.<sup>1</sup>

However, lobbying by corporate insiders against strict implementation of SOX can be used to distinguish between the competing views of the Act in two fashions. First, we can compare lobbying and non-lobbying firms to determine whether firms whose insiders lobbied against strict implementation of SOX are firms that are likely to be characterized by agency problems or firms primarily motivated by concerns over high compliance costs. Specifically, we can examine whether firms whose insiders lobbied against strict implementation of SOX are firms with traditional free cash flow problems: firms with high profitability, low growth opportunities, and poor governance, characteristics that make it feasible for managers to enjoy large private benefits of control (e.g., empire building or perquisites consumption). We can also examine audit fees, a major component of SOX compliance costs. Second, lobbying by corporate insiders can be used as a proxy to identify companies more likely to be affected by the legislation (positively or negatively), and thus allows us to circumvent the lack of a control group of firms unaffected by the Act. Under the improved disclosure and governance view, the more affected firms will be those for whom the disclosure and/or governance gain will be greatest. If SOX provides a net benefit to shareholders in the

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<sup>1</sup>Under the improved disclosure and governance view, insiders lobby against strict implementation due to SOX's effect of reducing insiders' ability to divert resources to themselves. Under the compliance cost view, insiders may lobby against SOX either because they choose to lobby in the interest of company shareholders, or because they anticipate a possible reduction in diversion of resources.

form of improved transparency, disclosure and corporate governance, and reduces misconduct, mismanagement, and perquisite consumption, then companies whose insiders lobbied against strict implementation of SOX should have higher cumulative returns than otherwise similar non-lobbying companies in the period leading up to the passage of SOX, as the market adjusts its expectations of future cash flows for these companies relative to their matched, less-affected, non-lobbying peers. Conversely, under the compliance cost view where SOX is detrimental to shareholders because it imposes costs that outweigh any associated governance gains, the more affected companies will be those for whom the net costs are highest, and thus we would expect lobbying firms to experience lower cumulative returns than non-lobbying firms.

We find that the firms most likely to lobby were firms in mature industries, with relatively low forecasted earnings growth, high profitability and poor governance. These are precisely the types of firms that Jensen's [1986] theory of free cash flow would predict are likely to provide more opportunities to management for expropriation, perquisite consumption or mismanagement of firm resources. In contrast, our analysis of audit fees indicates that lobbying firms are unlikely to be those that expect a large relative increase in compliance costs. Rather, lobbyists on average had lower audit fees relative to initial market value pre-SOX, and their audit fees relative to size increased by less, post-SOX, than those of non-lobbying firms.

One aspect of our research design, important for interpreting our findings, is that lobbying of the SEC with regard to implementation of SOX occurred primarily after the passage of the Act itself. For our identification strategy to be powerful, it must be the case that the market could predict which firms would be most affected based on ex-ante observable characteristics of firms, and that lobbying is a good indicator of which firms would be most affected. In addition to providing evidence supporting the improved disclosure and governance view, under the assumption that lobbying is a good indicator of being more affected, the examination of the economic determinants of lobbying validates that lobbying was, to some extent, predictable, based on ex-ante firm characteristics. Furthermore, we conduct an event study of abnormal returns observed around the submission date of a comment letter by a given company. The event study indicates that there was no discernible market reaction to the submission of the letter, suggesting that market participants were not surprised to see which firms lobbied (and thus, which firms were more likely to be more affected by SOX).

Having validated our research design, we turn to analyzing the returns of lobbying (more af-

ected) firms relative to non-lobbying (less affected) firms in the pre-passage period. Our portfolio analysis of returns reveals that during the period leading up to passage of SOX (February to July of 2002), cumulative returns were approximately 7 percentage points higher for corporations whose insiders lobbied against one or more of the SOX ‘Enhanced Disclosure’ provisions than for non-lobbying firms of similar size, book-to-market and industry characteristics. In contrast, we find no significant evidence of higher cumulative returns for those corporations whose insiders lobbied against one or more of the SOX ‘Corporate Responsibility’ provisions or for those corporations whose insiders lobbied against one or more of the SOX ‘Auditor Independence’ provisions than for comparable non-lobbying firms.

Many firms who lobbied against strict implementation of the ‘Corporate Responsibility’ or ‘Auditor Independence’ provisions, however, also lobbied against strict implementation of one or more of the ‘Enhanced Disclosure’ provisions. We therefore proceed to estimate the separate abnormal returns associated with each of the three categories by running firm-level regressions. The results from our firm-level models confirm a total abnormal excess return of approximately 7 percent during the period leading up to the passage of SOX for those firms whose insiders lobbied against the ‘Enhanced Disclosure’ provisions, and no significant abnormal excess return for firms lobbying against the ‘Corporate Responsibility’ or ‘Auditor Independence’ provisions. These relative returns suggest that while investors did not disapprove of the ‘Corporate Responsibility’ or ‘Auditor Independence’ provisions, the market expected SOX to benefit mainly the firms most affected by provisions related to ‘Enhanced Disclosure,’ rather than those affected primarily by ‘Corporate Responsibility’ or ‘Auditor Independence’ provisions.

Unsurprisingly, as the majority of the corporate sponsored letters sent to the SEC concerned ‘Enhanced Disclosure’ provisions, we obtain similar results when we do not distinguish between lobbying for specific categories of SOX rules, but instead look at the entire set of lobbying firms regardless of which categories of rules they lobbied against. This suggests that our return results are not an artifact of arbitrary classification of rule categories. Furthermore, when we look at specific sub-periods surrounding events that likely increased the probability of SOX passage or the strictness of the reform, we find that lobbyists experience significant abnormal excess returns above and beyond non-lobbyers during these sub-periods, which is consistent with our findings for the pre-passage period as a whole.

The results from our returns analysis in the pre-passage period are supportive of the improved

disclosure and governance view of SOX. Furthermore, they are consistent with the evidence provided in our research design validation models, which indicated that firms with entrenched management and firms that Jensen's Free Cash Flow Theory would predict would be more likely to be affected by SOX under the improved disclosure and governance view are indeed those that lobby against its strict implementation.

In the second half of our analysis, we turn our focus to the post-passage period. It is possible that investors had positive expectations regarding the overall effects of the SOX implementation in the pre-passage period, but that post-passage, during the implementation of the law, it became clear that either their positive expectations with regard to improved governance and disclosure were not warranted or that the associated compliance cost burden would outweigh these benefits. To examine whether investors felt that their positive expectations in the pre-passage period were warranted, we focus on the returns of lobbying and non-lobbying firms during the period after the passage of SOX. If shareholders gradually became aware that the measures introduced by the legislation would not result in higher shareholder value due to a watering down of the rules during implementation, we would expect to observe negative abnormal returns for lobbying firms relative to non-lobbyers in the period following SOX passage and until investor expectations settle at a new, less optimistic level. If, on the other hand, investors' positive expectations regarding the overall effects of SOX (and in particular, its 'Enhanced Disclosure' provisions) were warranted, we would not expect any differences between the returns of lobbying and non-lobbying firms in the post-passage period. Our analysis of returns in the post-passage period indicates that the returns for firms who lobbied against an 'Enhanced Disclosure' rule were similar to the returns of the non-lobbying comparison group, and, thus, that the increase in relative stock price experienced by lobbying firms did not reverse during the post-passage period.

Our study documents, first, that investors expected SOX to more closely align interests of insiders and shareholders; second, that lobbying firms are indeed those more likely to suffer from agency issues; third, that (relative) returns during the period preceding SOX passage are consistent with the views of investors; and fourth, that investors' positive expectations may have been warranted, based on returns in the post-SOX period. Consistent with the arguments presented by Coates [2007], our results indicate that in the eyes of public company shareholders, the most important and effective provisions in SOX were the 'Enhanced Disclosure' provisions, rather than the provisions related to 'Corporate Responsibility' and 'Auditor Independence.'

An obvious shortcoming of a research design which compares more affected firms to less affected firms, without having a comparable group of firms unaffected by the legislation studied, is that it does not speak directly to the overall effect of SOX on the public equity market. Considering the full period – from week 7 of 2002, when serious discussions about the legislation started, to the end of 2004 – we can say that the stocks of more affected firms (as proxied for by lobbying firms) outperformed those of less affected firms (proxied for by non-lobbying firms). Based on our returns analysis alone, we cannot unambiguously say that the net benefit of SOX for either group is positive. That said, given data on compliance costs, it is possible to use our lobbying methodology to circumvent the issue of only speaking to relative effects of a law on two groups of firms. While any conclusions from such an exercise are only as strong as our confidence in the estimates of compliance costs, we can use SOX cost estimates to argue that the net benefit to shareholders in the more affected (lobbying) firms may well be positive. Furthermore, with the addition of two assumptions, we argue that the net benefit to shareholders for the full set of publicly traded firms, similarly, may well be positive.

A second important caveat to our analysis is that we are not able to speak to the welfare effects of SOX, but only to the law’s effects on the shareholders of those companies that were publicly listed at the start of our sample. For example, our analysis cannot measure the overall welfare effect of changes in the propensity to list or remain listed and SEC-registered on U.S. markets due to SOX-related costs. In addition, we cannot rule out that insiders lost an amount equal to or greater than what outside investors gained. Finally, we note that while our analysis suggests that shareholders expected SOX to be value-increasing on average for publicly traded firms, the lobbying firms in our sample are predominantly large, established organizations, and thus our returns analysis does not provide specific conclusions as to the effect of SOX on smaller firms.

Our study is related to an emerging literature attempting to evaluate the effects of SOX. Insightful reviews of this literature (which has not produced a general consensus on the effects or value of the Act) are presented in Coates [2007], Leuz [2007] and in the discussion piece by Karolyi that follows this paper. Zhang [2007] examines the reaction of the overall U.S. stock market to legislative events leading to the passage of the Act. While Zhang [2007] finds significantly negative returns around these legislative events, these returns might be due to other, confounding events that are unrelated to SOX. Jain and Rezaee [2006] also study the aggregate market reaction to

SOX, reaching a conclusion opposite to that of Zhang [2007].<sup>2</sup>

As in our paper, other studies seek to circumvent the lack of a control group of unaffected firms by using alternative approaches or outcome variables. For example, Cohen, Dey and Lys [2008] evaluate the impact of SOX by examining changes in earnings management behavior and in the informativeness of firms' earnings announcements around the passage of the Act, and find a decline in earnings management activity following the passage of SOX. The paper closest to ours in approach is Chhaochharia and Grinstein [2007], who study the announcement effect of SOX on firm value. To overcome the lack of an unaffected control group, they look at firms in the pre-SOX period and sort them into two groups: most and least compliant (according to certain proposed SOX provisions). Based on a comparison of these two groups, their study finds a positive value effect associated with SOX for large firms, whereby firms that need to make the most changes in order to comply with the new rules outperform firms that require fewer changes over the announcement period. Conversely, they find a negative effect for small firms. While Chhaochharia and Grinstein [2007] study the perceived value of SOX for firms most affected by certain specific provisions of the Act, our lobbying approach allows us to expand on their work by examining shareholders' views regarding the full spectrum of SOX's provisions as well as differentiate more precisely between the various categories of these provisions. Additionally, since our analysis includes the period after the law was passed, we are also able to separate the perceived effects of the Act as passed in Congress from the net effects resulting from the actual implementation of those rules.

Our paper is also related to a growing literature that uses the lobbying activities of corporations to examine the impact of regulation. The most closely related study is that of Lo [2003], who examines the economic consequences of the 1992 revision of executive compensation disclosure rules by using a lobbying approach quite similar to that which is employed in this study. Lo [2003] finds, in support of the value of increased disclosure, that corporations whose insiders lobbied the SEC *against* the proposed regulation had *positive* excess stock returns of about 6% over the 8-month period between the SEC's announcement that it would be pursuing reform and the adoption of the proposed regulation. In addition to addressing a different reform, a key difference between Lo [2003] and this study is that we study not only the opinions of corporations who lobby the SEC, but also the views of non-investor groups and of individual investors and investor groups.

The remainder of this paper is organized as follows. Section I presents an overview of the

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<sup>2</sup>A more detailed review of the more general lobbying literature is provided in the discussion piece by Karolyi that follows this paper.

Sarbanes-Oxley Act, the time line of its adoption, and the role of lobbying in the design of the resulting rules. Section II details our hypotheses and research method. Section III presents our empirical findings. Section IV discusses interpretation of our results. Section V concludes.

## **I. The Sarbanes-Oxley Act of 2002**

### **A. The Legislative Time-Line**

The collapse of Enron in October 2001, followed by the subsequent exposure of several accounting and governance scandals at Qwest Communications, Global Crossing, Worldcom, Adelphia and Tyco in the spring of 2002, triggered a flurry of legislative proposals to reform corporate business practices and improve accounting and governance systems for publicly traded companies.

The Sarbanes-Oxley Act resulted from the combination of reform bills introduced by Senator Paul Sarbanes, Democrat of Maryland, and Representative Michael Oxley, Republican of Ohio. Representative Oxley's reform bill was first introduced in the House on February 13th, 2002. It was passed in committee on April 16th, 2002 and was subsequently passed in the House on April 24th, 2002. In May of 2002, the Sarbanes reform bill was circulated in the Senate Banking Committee; the Committee subsequently passed the bill on June 18th, 2002. The full Senate began debate on Sarbanes' bill on July 8th 2002 and passed the bill with overwhelming support on July 15th, 2002. On July 19th, 2002, the House and Senate formed a conference committee and began negotiations to merge the two bills. The final legislative bill, known as the Sarbanes-Oxley Act of 2002, was passed by Congress on July 25th, 2002 and was signed into law by the President on July 30th of that year.

SOX directed the SEC to immediately begin rule-making activities, and the SEC commenced such action in late August 2002. SOX-directed rule-making activities continued throughout 2003 and into the beginning of 2004, with major rule-making activities completed by June 2004.

### **B. The Content of the Act**

The Sarbanes-Oxley Act established the Public Company Accounting Oversight Board (PCAOB) and established new rules for and restrictions on corporations, corporate directors and auditors. The Act is arranged into eleven titles.

The first four titles of the Act are the most relevant for issues of public company compliance. Title I of the Act establishes the PCAOB, which is charged with overseeing and registering public

accounting firms and establishing standards related to auditing and internal controls. Title II of the Act covers issues related to auditor independence and places restrictions on public accounting firms with regard to the provision of non-auditing services, as well as mandating a periodic rotation of the coordinating and reviewing auditing partners. Title III of the Act deals with corporate responsibilities, including the independence of the auditing committee, improper influence on conduct of audits, executive certification of financial reports, penalties related to financial restatements, and rules of professional responsibility for attorneys. Title IV of the Act deals with enhanced financial disclosure, including disclosures in periodic reports, enhanced conflict of interest provisions, disclosure of transactions involving management or principal stockholders, the disclosure of the existence of an audit committee financial expert, and the much-discussed management assessment of internal controls.

The remaining titles of the Act either primarily deal with issues unrelated to compliance by publicly traded firms or set up criminal penalties and, as such, were (with two exceptions noted below) not subject to interpretation and implementation by the SEC. Title V of the Act deals with analyst conflicts of interest, Title VI deals with SEC resources and authority, and Title VII with studies and reports. Title VIII of the Act deals with corporate and criminal fraud accountability and Title IX with enhancements to the penalties for white collar crime. Title X deals with the signing of corporate tax returns by chief executive officers and Title XI with definitions of corporate fraud and accountability. Of these remaining titles, only Title VIII, section 802, on criminal penalties for altering documents, and Title IX, Section 906, on corporate responsibility for financial reports, generated SEC rule-making. We group SEC rules related to Sections 802 and 906 with those related to Title III since they cover similar topics. Due to the SEC's lack of rule-making activities with regards to Title V, VI, VII, X and XI, we do not deal directly with these Titles of the Act.

We classify the rule-making activities of the SEC with regard to Titles I through IV of SOX into three broad categories. Rule-making activities related to auditor independence, Title II of SOX, are classified as 'Auditor Independence' rules. Rule-making activities related to corporate responsibilities, Title III of SOX, are classified as 'Corporate Responsibility' rules. Rule-making related to issues of enhanced financial disclosure and the PCAOB, Titles IV and I of SOX, are classified as 'Enhanced Disclosure' rules. We include Title I, which establishes the PCAOB, in the 'Enhanced Disclosure'-rules category due to the close overlap between the PCAOB's responsibilities and rule-making and the disclosure items mandated in Title IV. Indeed, a significant part of the

PCAOB’s purpose is to determine and regulate the standards for the enhanced disclosures mandated by Title IV.<sup>3</sup>

In conjunction with the federal legislation, the major stock exchanges produced their own governance-related listing requirements. In February of 2002, the SEC called on the major stock exchanges to review their governance requirements. NYSE’s and NASD’s boards adopted governance proposals and submitted them to the SEC for approval. The SEC solicited public comment on two proposals and, upon reviewing the comments, approved the NYSE and NASD proposals with some modifications. We include SEC rule-making related to the governance and listing standards of the NYSE and NASDAQ exchanges in the ‘Corporate Responsibilities’ category. Additionally, contemporaneously with SOX rule-making, the SEC issued one proposed rule on a disclosure-related issue, “Disclosure Regarding Nominating Committee Functions and Communications Between Security Holders and Boards Of Directors,” which was later adopted. Due to the nature of this rule, it is included in the ‘Enhanced Disclosure’ category. All our reported results are robust to exclusion of these three rules.<sup>4</sup>

### **C. The Role of Lobbying in the Design of the Rules**

The Sarbanes-Oxley Act is a statute and as such, can only be changed by another Act of Congress or by a court that rules it unconstitutional. Since Congress was well aware of the lengthy time-line required to perpetuate new or amended legislation, SOX consisted mainly of principles. The rules and enforcement actions by which these principles are implemented were left to be determined by the SEC, which can respond rapidly to feedback and update the rules as needed (Coates [2007]).

Section 3A of the Sarbanes-Oxley Act grants authority to the Securities and Exchange Commission to “promulgate such rules and regulations, as may be necessary or appropriate in the public interest or for the protection of investors, and in furtherance of this Act.” The SEC started rule-making activities in August 2002. The rule-making activities prescribed by SOX continued into 2004. The SEC took public comments into consideration when drafting the final rules, and indeed, shareholders, corporations and others could and did influence how strictly SOX was implemented.

After the passage of SOX, the relevant sections of each title were broken down and drafted in

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<sup>3</sup>All our reported results are robust if the rules relating to Title IV are analyzed separately from those relating to the PCAOB.

<sup>4</sup>In the fall of 2003, the SEC proposed one further rule related to corporate responsibility, which was not part of SOX, and which ultimately was not implemented. This rule relates to nominations of directors by security holders. We do not use this rule to define lobbying firms, and when matching lobbying and non-lobbying firms below, we exclude firms that lobbied for or against this SEC proposal from our set of non-lobbying firms.

a proposing release, which was then circulated by the SEC for public comment. At the end of the comment period, the SEC drafted and approved a final adopting release for each rule. In Appendix A, we classify and briefly describe all of the SOX-related rules proposed by the SEC. We report the date of the proposing release, the date of the adopting release, the related SOX section, and whether the rule was adopted with or without amendments.<sup>5</sup>

For each of the proposed rules, the SEC solicited public comments that were to be submitted by a specific deadline prior to the adopting release date. Comment letters submitted to the SEC by electronic means were made available to the public on the SEC website, while those submitted in paper form were made available through the SEC's public reference section. In Section III, we describe the content of the letters submitted to the SEC in detail.

The major event window we employ to understand the perceived value of SOX is the time period leading to the approval of the Sarbanes-Oxley Act. Our event window starts on February 8, 2002 and ends on July 26, 2002. The first week of our event window leading up to SOX passage includes February 13, 2002, when Oxley's bill was introduced in the House and the SEC announced that it intended to propose several rules designed to improve disclosure and governance. The last week of the window includes July 25, 2002, when Congress passed the law.<sup>6</sup> Because most of the rule-making activity is concentrated after the passage of the Act (after July 25th, 2002), the event window allows us to separate the perceived effect of the law from the information potentially generated by the submission of comments to the SEC.

To understand the effects of SOX as implemented, as opposed to the perceived effects of the Act as passed by Congress, we also examine the period following the passage of the Act: July 26th, 2002 to the end of 2004. By examining returns for lobbying and non-lobbying firms in the post-passage period, we can assess the net effect of the final SOX rules, given the strictness and effectiveness of the implementation and the costs of compliance associated with such.

## II. Hypotheses and Research Method

There are two competing views of the likely impact of SOX. The view on which Congress based the Act is that SOX would improve transparency, disclosure and governance, thereby decreasing

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<sup>5</sup>Three of the proposing releases that we list as releases generated by SOX were issued before the actual passage of the law. These are cases where the content of the SEC's proposed rule was subsequently mandated by SOX and adopted as such or where the SEC's proposed rule was augmented by a subsequent release under SOX and adopted as such.

<sup>6</sup>While the President signed the law on July 30, 2002, presidential approval was viewed as a foregone conclusion once the Act was passed in Congress.

misconduct and mismanagement by corporate insiders and increasing value for shareholders well above the associated costs of compliance. We refer to this positive view as the *improved disclosure and governance view*.

The alternative view of SOX is that the main impact of SOX would be to impose large compliance costs on firms, with a negative net effect of the act on shareholder value. According to this view, SOX would either be ineffective in diminishing any mismanagement or misconduct, or compliance costs would be sufficiently large to outweigh any benefits. Proponents of this view would argue that private markets already lead to the shareholder-value-maximizing disclosure and governance structure and that government interference leads to sub-optimally large amounts of resources being spent on disclosure and governance issues. We refer to this negative view as the *compliance cost view*.

### **A. Lobbying by Shareholders and Corporate Insiders**

One method of distinguishing between these two views of the Act is to study whether shareholders supported or opposed SOX. Under the improved disclosure and governance view of SOX, shareholders should lobby in favor of SOX; in contrast, under the compliance cost view of SOX, shareholders should oppose SOX.

Lobbying by corporate insiders against SOX contains less *direct* evidence about SOX's average effect on shareholders. Lobbying by corporate insiders *in favor* of SOX is informative: we should observe such lobbying only if corporate insiders work in shareholders' interests and SOX is beneficial to shareholders overall. Lobbying *against* strict implementation of SOX, however, could be consistent with either the improved disclosure and governance view or the compliance cost view. On the one hand, under the positive view of the Act, SOX may be beneficial to shareholders, but management may more concerned with its own interests and, thus, lobby against strict implementation. Under this interpretation, firms whose insiders lobby against SOX are those whose shareholders stand to *benefit* the most from SOX. On the other hand, under the compliance cost view of SOX, opposition to the Act by corporate insiders signifies either (a) that SOX has at least some ability to reduce insider misconduct/mismanagement, or (b) that compliance costs differ in the cross-section of firms and that firms whose insiders lobby against SOX are those with particularly large compliance costs. Under this interpretation, firms whose insiders lobby against SOX are those whose shareholders stand to *lose* the most from SOX.

Lobbying by insiders is still useful for distinguishing between the two views of SOX, under

the assumption that the insiders more likely to lobby are those from firms more affected (either positively or negatively) by SOX (see Dewatripont and Tirole [1999] and Grossman and Helpman [1994]). First, we can analyze the samples of lobbying and non-lobbying firms to determine whether lobbying firms are those firms that are likely to be characterized by agency problems. Specifically, we can examine whether firms whose insiders lobby against strict implementation of SOX are firms with traditional free cash-flow problems: firms with high profitability, low growth opportunities, and too much cash retained in the firm. These characteristics make it feasible for managers to enjoy private benefits of control. Similarly, we can analyze the samples of lobbying and non-lobbying firms to determine whether firms whose insiders lobby are those who are motivated by concerns about higher compliance costs. Specifically, we can examine audit fees which are a major component of SOX compliance costs. If audit fees increase less for lobbying firms from the pre-SOX period to the post-SOX period or increase to a similar extent for lobbying and non-lobbying firms, this suggests that differential compliance costs are not a central driver of insider lobbying against SOX. Conversely, if audit fees increase more for lobbying firms than for non-lobbying firms from the pre-SOX period to the post-SOX period, this would indicate that insider lobbying is done in shareholders' best interest and would indicate that some firms' shareholders are hurt by SOX, which is consistent with the compliance cost view of SOX.

Second, under the assumption that lobbying firms are those most affected by SOX, firms can be split into groups based on whether their insiders lobbied or not against a strict implementation of SOX; this split can be used to test cross-sectional predictions regarding returns during the period leading up to passage of SOX. Returns during the period leading up to SOX passage are informative about both the motives behind the lobbying by corporate insiders and the differential impact of SOX on more and less affected firms. Under the improved disclosure and governance view, returns should be higher for more affected, i.e., lobbying firms, and thus, we should observe positive abnormal returns for these firms relative to similar non-lobbying firms.<sup>7</sup> In contrast, under the compliance cost view, returns during the pre-passage period should be lower for more affected firms and, thus, we should observe negative abnormal returns for the firms whose insiders lobby against strict implementation of SOX.<sup>8</sup> Furthermore, the cumulative abnormal returns during the

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<sup>7</sup>As the probability of legislation went from zero to one, the price of a given company should gradually move upward from  $P$  to  $P + \Delta P_{sox}$  where  $\Delta P_{sox}$  is the present value of the increase in dividends due to SOX. If  $\frac{\Delta P_{sox}}{P}$  differs in the cross-section, firms with large values will be observed to have abnormally good returns over this period.

<sup>8</sup>We do not analyze firms whose insiders express mixed opinions or positive opinions, due to the small number of such firms.

period leading up to SOX passage provide an estimate of the difference across shareholders in the net benefit from SOX, which is particularly informative about the Act's impact.<sup>9</sup>

## **B. The Timing of Lobbying**

One aspect of our research design is important for interpreting our findings. The majority of lobbying occurs after Congress passed SOX on July 25th, 2002. Our approach to testing the predictions for stock returns during the period leading up to passage will therefore be powerful only if (i) shareholders were aware of which types of firms were likely to be most affected by SOX (and thus, under the assumption that lobbying is a good proxy for the econometrician as to which firms were likely to be most affected, to lobby against strict implementation), and if (ii) the relationship between lobbying and returns is causal.

In our analysis, we will take three approaches to demonstrate (i) above. First, an analysis of the economic determinants of lobbying, based on variables known at the start of our sample, can provide direct evidence on whether lobbying is predictable, and thus, under the maintained assumption that lobbying is a good proxy for being more affected, can indicate whether the market could predict which firms would be more affected by SOX. Second, a firm-level event study of the returns for lobbying firms around the submission date of a letter to the SEC can be used to determine whether market participants were surprised to learn which firm lobbied (and thus, which firms were likely to be more affected by SOX). Third, to the extent that our analysis does reveal differences in the returns over the lead-up period for lobbying and non-lobbying firms, this will provide evidence in and of itself that (i), as well as our underlying assumption that lobbying activity is an indicator of being more affected by the legislation, are reasonable.

While the reverse causality concern raised in (ii) is a potential problem, our research design allows us to speak to this issue. Reverse causality in our setting would imply that good returns caused insiders to lobby. Any such effect, however, would not predict a significant differential in the excess returns of lobbying firms (over and above similar non-lobbyers) when comparing the pre- and post-passage periods. To the extent that excess returns of lobbyists differ in the pre- and

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<sup>9</sup>The improved disclosure and governance view of the Act also predicts that, on average across firms, returns during the period leading up to passage should be abnormally positive (relative to a set of firms with no news about disclosure and governance). The compliance cost view, similarly, has predictions about the average effect of SOX across firms. Returns during the period leading up to passage should be abnormally negative (relative to a set of firms with no news about disclosure and governance). Given the lack of a control group of (comparable US) firms not impacted by SOX, these additional predictions are impossible to test, since they cannot be distinguished from aggregate shocks unrelated to SOX.

post-passage period, this suggests that causality goes in the direction we assume, i.e., that being more affected by SOX leads to excess returns, rather than it being simply the case that better (or worse) performing firms tend to lobby without necessarily being more affected by the legislation. A significant differential in the pre- and post-passage excess returns of lobbyists will thus validate our research design.

It is worth noting that while this approach can be used to help resolve the causality concern in our return analysis, we cannot use a similar approach to examine changes in operating performance for lobbying and non-lobbying groups in a causal fashion. While return data is available on a weekly or daily basis, operating performance is only available to us on an annual basis, which does not allow us to examine whether there is a kink in performance around the date of SOX passage. This is a key reason for focusing on returns rather than on operating performance.

If, indeed, lobbying is predictable, a natural question that arises, is why we should choose to use lobbying as a proxy for more affected firms, rather than simply using the variables that predict lobbying. There are two central advantages to a research design that employs lobbying rather than its predictors. First, lobbying is likely a stronger proxy for being more affected than the predictors of lobbying alone. By employing the predictors, instead of lobbying itself, the researcher is limited to a few observable variables that are not likely to fully capture many aspects of a firm's structure or management that may cause it to be more affected by SOX (and which may be known to the market). As econometricians, we cannot observe the state of a firm's internal controls, nor many aspects of its governance or management. Even if lobbying is to some extent predictable, it is likely that a substantial amount of the variation in lobbying is not driven by variables observable to us. It is reasonable to assume that shareholders were able to observe more information in real-time than we can observe and therefore that they were better able to predict lobbying than our models can. Lobbying is in essence revealed preference and is likely to capture many more of these aspects of the firm. Second, some of the characteristics that predict lobbying may be of types that the empirical asset-pricing literature has documented as being related to average or realized returns (such as size, book-to-market ratios, or industry). If so, it would be statistically difficult to study the return implications based on predicted rather than actual lobbying. Finally, some firm's characteristics may predict lobbying against all the different categories of SOX-related rules. Using predictors, rather than actual lobbying, would therefore make it difficult to distinguish the relative benefit of the various subsections of SOX. In contrast, lobbying can be observed at the individual title and

rule level, thus allowing the researcher to distinguish between shareholders' reactions to different aspects of SOX.

### III. Results

#### A. Opinions of Letter Writers

The opinions of commenters are tabulated in Table I. Overall, our study is based on 1,948 letters. Panel A shows how the letters are distributed across various types of letter writers. Of the 1,948 letters, 629 are from corporations (or, more precisely, from corporate managers or directors). 216 are from non-investor groups such as the Business Roundtable and the American Society of Corporate Secretaries. Investor groups, typically pension funds (including union pension funds), composed 125 of the letters, and 240 are from individuals. The remaining 738 letters are from accountants (individuals and groups), lawyers (individuals and groups), academics, or others (mainly church groups and governments). Around 90 percent of the letters were submitted after July 25th, 2002, the date the Act was passed, with 48 percent submitted in the remainder of 2002, 40 percent submitted in 2003, and 2 percent submitted in 2004.

We classify the letters into three categories. Letters classified as "Positive" are those that favored the rule commented on, or that called for stronger measures than those stated in the SEC's proposing release. Letters classified as "Negative" are those that opposed the rule commented on, or argue for delays or exemptions in its implementation. The last category, "Neutral," is used for letters which commented on several of the sub-provisions in a particular proposing release and where the commenter was positive on some sub-provisions and negative on others. A small number of letters which were difficult to classify are also included in the neutral category.

The first three rows of Table I shows, for each type of commenter, across all rules, the total number and percentage of positive letters, neutral letters, and negative letters. It is clear that individuals and investor groups were overwhelmingly in favor of the SOX provisions. 79 percent of letters from individuals and 83 percent of letters from investor groups were in favor of the rule commented on. The following three rows of the table provide similar summary statistics that exclude the three rules not directly linked to SOX. Individuals and investor groups are again predominantly positive on the rules commented on, with about 75 percent of both expressing positive views.<sup>10</sup> An important feature of the comment letters from individuals and investor groups

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<sup>10</sup>Our subsequent results remain roughly unchanged when we exclude the few rules not directly related to SOX from the analysis.

is that the opinions expressed are not specific to a particular firm. In other words, the letters most likely state the author's view of the average effect of the particular provision across stocks as opposed to its effect on an individual firm. Of course, it is possible that some individuals may be motivated by particularly poor disclosure/governance for a particular firm whose stock they own. Since the provisions of SOX apply to all publicly traded firms, however, it seems fair to consider opinions expressed as views about the total set of stocks the investor/investor group holds or intends to hold in the future. Under this assumption, the positive views expressed by the vast majority of individual investors and investor groups provide support for the improved disclosure and governance view of SOX.

The remainder of Table I tabulates opinions by the rule and major rule category commented on. We first present results for the major rule category 'Enhanced Disclosure' (SOX Title IV and I), then turn to the results for 'Corporate Responsibility' (SOX Title III) and finally to the results for 'Auditor Independence' (SOX Title II). The 'Auditor Independence' rule generated much fewer comments, the majority of which were submitted by accountants and accounting firms.

Approximately 80 percent of both individual investors and investor groups wrote in favor of the 'Enhanced Disclosure' rules, with similar results for individual investors and investor groups that commented on 'Corporate Responsibility' rules. Investors thus appear to view both the disclosure and governance provisions of SOX as being value increasing, even after any compliance costs borne by shareholders. Investor groups that lobbied were overwhelmingly in favor of the 'Auditor Independence' rules, while the few individuals who commented on these rules were more divided.

To our knowledge, shareholder support for SOX has not diminished since the period covered by the letters we analyze. For example, at the SEC's "Roundtable Discussion on Second-Year Experiences with Internal Control Reporting and Auditing Provisions" held on May 10, 2006, institutional investors expressed continued support for SOX, specifically for Section 404 on internal controls. In her statement dated March 1st, 2006, Ann Yerger from the Council of Institutional Investors (an association of more than 130 corporate, union, and public pensions plans with more than \$3 trillion in assets) wrote: "...the Council believes the benefits over time will far outweigh the costs and will be a positive for all involved in the U.S. capital markets. . . . In closing, Section 404 is working."

The opinions of corporations and of non-investor groups contrast starkly with those of investors. Across all rules, 81 percent of letters written by corporations (corporate managers or directors) and

73 percent of letters written by non-investor groups argued against the rule they commented on. Roughly similar percentages of letters from corporations and non-investor groups express negative views about the rules in all three individual categories of SOX provisions.

Since both the improved disclosure and governance hypothesis and the compliance-cost hypothesis predict that insiders should lobby against SOX, alternative theories are required to explain the 9 percent of corporations and 27 percent of non-investor groups who lobbied in favor of the rule commented on. At least one CEO of a large publicly traded firm stated that he is in favor of SOX because compliance costs were disproportionately large for smaller firms and therefore put these at a competitive disadvantage. An alternative story for positive lobbying by a minority of corporations and non-investor groups is that these CEOs acted on behalf of shareholders and thus expressed views in line with those of the majority of individuals and investor groups.

For data-availability reasons, our subsequent analysis focuses on publicly traded corporations. A given letter may be signed by managers or directors of multiple companies. 79 percent of the 629 letters from corporations are signed by at least one manager/director from a publicly traded company. Letters that represent insiders of publicly traded firms are even more likely to express negative views about the rule commented on. 86 percent of such letters express negative views, compared to 62 percent for letters representing a non-publicly traded firm.

A given company's managers or directors may be signatories to multiple letters, and a total of 328 publicly traded firms are represented among the corporate letters. To ease the interpretation of our results, in our groups of lobbying firms below we omit letters from corporations expressing neutral or positive opinions, as there are too few such letters to allow a separate analysis of these firms. Of the 328 publicly traded firms that are represented among the corporate letters, 288 firms are thus classified as lobbying against 'Enhanced Disclosure' and/or 'Corporate Responsibility,' and/or 'Auditor Independence.'<sup>11</sup>

With regard to the other types of letter writers, the majority of accountants and lawyers argued against the rules they commented on, while the opinions of academics and others were more mixed. The negative views of accountants and lawyers often refer to cases where the letter writer points out practical complexities of the rule commented on or where auditors lobby against regulation that restricts the advisory role of auditing firms.

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<sup>11</sup>Of the 288 firms, 275 are included in our return analysis. The remaining 13 do not have weekly return data available for the first week of our sample.

## B. Matching Lobbyers to Non-Lobbyers

In much of our analysis below, we will need to compare lobbying firms to appropriate groups of non-lobbying firms. The objective of comparing lobbying firms to a set of non-lobbying firms is to net out any effects of aggregate shocks not related to SOX. To do this we need to decide what constitutes appropriate comparables, i.e., on what characteristics lobbyers and non-lobbyers should be matched. We also need to decide how the matching should be done.

A large literature in empirical asset pricing documents that small firms (measured by market value of equity) and firms with high book-to-market equity ratios on average tend to outperform large firms and firms with low book-to-market ratios. Furthermore, in a particular time period, realized returns could differ systematically across firms with different size, book-to-market, industry, or other characteristics, and such patterns may be entirely unrelated to the effects of SOX. It is therefore important to compare lobbying and non-lobbying firms with similar characteristics along these dimensions. Of course, there is a limit to how many characteristics one should match lobbying and non-lobbying firms on. In the extreme, if one matched along all observable dimensions related to disclosure, governance and variables measuring likely SOX compliance costs, then it may be more or less random which firms (within a set with similar such characteristics) decided to lobby the SEC. Such a matching scheme would then, by construction, find no different return patterns between lobbyers and non-lobbyers and would wrongly lead to the conclusion that SOX was irrelevant for firm value. Based on these considerations, we will consider a variety of approaches to match lobbying and non-lobbying firms on size, book-to-market, and industry (the leading variables known to be related to expected returns or likely to be related to realized returns for reasons not related to SOX), but will not match on variables directly related to disclosure, governance or likely compliance costs.

There are a number of approaches we can take to match our lobbying firms to similar non-lobbyers. First, we could define comparison portfolios of non-lobbying firms using grids across size, or size and book-to-market, or size and industry, or size, book-to-market, and industry. A drawback of a such fully non-parametric approach based on grids is that if a detailed grid is used along each of the three dimensions, the number of firms in many of the cells becomes small, making comparison of lobbying and non-lobbying firms statistically less reliable. An alternative approach, borrowed from the literature on propensity score matching in labor economics, is to estimate how the characteristics one would like to match on relate to lobbying and then match a given lobbying

firm with a set of non-lobbying firms that have the same probability of lobbying based on the matching characteristics (size, book-to-market equity, and industry). The basic advantage of this approach is that instead of matching directly on multiple dimensions, we match lobbying and non-lobbying firms based on a one-dimensional “summary” variable: the probability of lobbying as predicted by the matching characteristics (also referred to as a propensity score). We can then allow for a detailed grid along this dimension.

Specifically, we do the following for each of the three categories of SOX rules. First, we estimate a probit model of lobbying against that SOX rule category (e.g., ‘Enhanced Disclosure’). The right hand side variables are the firm’s log market capitalization, the square of its log market capitalization (to allow for non-linearities), its book-to-market ratio, an indicator for missing book-to-market, and indicator variables for the 49 Fama-French industries. The probit model is estimated using data for the first week of our analysis. Based on the probit model, we calculate the predicted probability of lobbying against that SOX rule category for all firms (lobbying and non-lobbying) in the sample. The predicted probability is what is referred to as the propensity score.<sup>12</sup> Next, we sort firms based on their propensity scores. We are interested in comparing a given lobbying firm with a set of non-lobbying firms that have similar propensity scores. We define 20 bins of lobbying and non-lobbying firms as follows. We calculate the percentiles of the propensity score with the set of lobbying firms and denote them by p5, p10, p15, etc. All lobbying and non-lobbying firms with propensity scores less than p5 constitute the first bin, all lobbying and non-lobbying firms with propensity scores between p5 and p10 constitute the second bin, and so on, up to the twentieth bin. By defining the bins based on the propensity score percentiles for lobbyists, we ensure that each bin has a meaningful number of lobbying firms. For robustness, we alternatively calculated both 100 bins of equal width across the range of propensity scores (as is common in the labor literature) and 100 bins based on the percentiles of predicted probability of lobbying for all firms in the sample rather than lobbyists alone (analogous to the asset pricing literature approach to portfolio construction). We also run propensity score matching on other measures of size (assets), profitability (ROA), growth opportunities (either firm age or analyst long term forecasts) and industry. Our results are robust to these alternative approaches.

When doing propensity-score matching, it is essential to ensure that the probit model used is sufficiently flexible so that the affected and unaffected (here, lobbying and non-lobbying firms)

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<sup>12</sup>Our results are not sensitive to the use of a probit model or a logit model. They are also not sensitive to including higher order terms of market capitalization.

are truly similar within each bin. The comparison is typically done both in terms of the propensity scores and in terms of the matching characteristics (see Imbens and Wooldridge [2007] for a description of propensity-score matching). Figure 1 illustrates the results of our propensity-score matching. For brevity, we illustrate results only for the propensity-score match that matches firms lobbying against ‘Enhanced Disclosure’. The top graph plots the average propensity score within each bin for lobbyists and non-lobbyists. The second graph repeats this with averages of log market capitalization, and the third row focuses on averages of book-to-market ratios. In general, our matching approach appears to be good. Lobbyists and non-lobbyists have very similar average propensity scores and size within each bin. The fit is less good for book-to-market equity. This is driven by book-to-market equity being a much weaker determinant of lobbying than size.<sup>13</sup>

In Table II we provide statistical analysis on the quality of the match and on the importance of matching. The table shows t-tests for differences in means between lobbyists and non-lobbyists before and after matching.<sup>14</sup> Results are shown for each of the three major rule categories as well as for a propensity score match which combines all lobbyists into one group.<sup>15</sup> For brevity we focus the table on market capitalization and book-to-market equity, and discuss but do not display in the table the results for the set of industry categories.

For each of the three types of lobbying, and for lobbyists overall, there are large and significant differences in log market capitalization and log market capitalization squared between lobbyists and non-lobbyists prior to matching. This emphasizes the need for careful matching. After propensity score matching, the size differences are small and insignificant across lobbyists and non-lobbyists. Book-to-market equity is significantly different pre-match for firms lobbying against ‘Corporate Responsibility.’ Post-match there are again no significant differences in book-to-market equity

<sup>13</sup>For brevity, we do not report the probits for the propensity score matching. They are available on request.

<sup>14</sup>The t-tests of equal means are performed using the same approach as that used by the Stata package `pstest`. Our matching corresponds to propensity-score-kernel matching with a uniform kernel and 20 propensity score bins (this simply means that the control group for a given lobbying firm is comprised of all the non-lobbyists in the bin with equal weight). To test equality of means pre-match, we regress the variable (e.g., log market capitalization) on a constant and a dummy for lobbying using an OLS regression. To test equality of means post-match, we run the same regression, but now weight observations (using Stata’s importance weights) as follows. For each propensity score bin, count the number of lobbying firms (N) and the number of non-lobbying firms (M). Each lobbying firm receives a weight of 1 (so the sum of weights for lobbyists is N for that bin). Each non-lobbying firm receives a weight of  $N/M$  (so the sum of weights for non-lobbyists is also N for that bin). We code this ourselves rather than using `pstest` directly since we want to define the set of lobbyists as those not lobbying against any of the three categories of SOX rules (as opposed to those not lobbying against the particular one of the three rules in focus in a particular panel of the table). This corresponds to how we define the set of non-lobbyists in our subsequent analysis.

<sup>15</sup>We use this overall lobbying propensity-score match for a firm-level analysis which seeks to estimate the separate abnormal returns associated with each type of lobbying by including dummies for each of the three types of lobbying as explanatory variables in return regressions. This allows only propensity-score matching on one propensity score, rather than the three separate matches that we use for our portfolio-level results.

across lobbyists and non-lobbyists. In terms of industry, for lobbying against ‘Enhanced Disclosure,’ 13 industry dummies have significantly different means across lobbyists and non-lobbyists pre-match at the 10 percent level. For lobbying against ‘Corporate Responsibility,’ 11 industry dummies have significantly different means across lobbyists and non-lobbyists pre-match. For lobbying against ‘Auditor Independence,’ 4 industry dummies have significantly different means across lobbyists and non-lobbyists pre-match. For overall lobbying, 13 industry dummies have significantly different means across lobbyists and non-lobbyists pre-match. After matching, no industry dummy has a significantly different mean across lobbyists and non-lobbyists for any of the lobbying categories. In sum, our propensity-score matching is successful in eliminating differences in size, book-to-market equity, and industry across lobbyists and non-lobbyists. In our subsequent analysis, all matching of lobbying to non-lobbying firms will follow the approach described above.

## **C. Determinants of Lobbying by Corporate Insiders**

### **C.1. Agency Costs**

As noted in Section II, lobbying by corporate insiders is useful in that we can analyze the samples of lobbying and non-lobbying firms to determine whether lobbying firms (our proxy for more affected firms) are those firms that are likely to be characterized by agency problems or high expected compliance costs. Specifically, we can examine whether firms whose insiders lobby against strict implementation of SOX are firms with traditional Jensen [1986] free cash-flow problems: firms with high profitability, low growth opportunities, and poor governance, characteristics that enable managers to enjoy private benefits of control. We can also examine audit fees, a major component of SOX compliance costs, to determine whether high expected changes in audit fees were a motivating factor for lobbying firms.

Table III presents summary statistics for our sample of lobbying and non-lobbying firms. Panel A of Table III presents statistics for those firms that lobbied against the ‘Enhanced Disclosure’ provisions of SOX, Panel B for those firms that lobbied against the ‘Corporate Responsibility’ provisions of SOX, Panel C for those firms that lobbied against the ‘Auditor Independence’ provisions of SOX, and Panel D for non-lobbyists.

Within the agency-theory framework, firm size is a key measure of the potential amount of resources available for insiders to extract. This is the case both in the sense that large firms have more scope (in dollar terms) for insider mismanagement, perquisites, etc., and in the sense that size itself may be an indicator of empire building (expansion of the firm beyond the shareholder

value-maximizing size). Under the improved governance and disclosure view, such characteristics generate stronger incentives for insiders of larger firms to lobby against SOX. We present three measures of size: market capitalization, total assets, and sales. Across all three types of lobbyists and all three size measures, lobbying firms are significantly larger than non-lobbyists. If there is a fixed cost element to lobbying, however, a positive relationship between lobbying against SOX and firm size may not reflect differential effects of SOX on large firms (either good effects via reductions in agency costs or bad effects via compliance costs), but may simply indicate that larger firms find it easier to lobby via lower relative costs of lobbying. We therefore study additional firm characteristics.

Jensen's free cash-flow theory predicts that firms with high operating cash flows and low growth opportunities are more likely to suffer from insider expropriation of cash flows or mismanagement. If SOX was expected to reduce insider ability to expropriate or mismanage firm funds, insiders in firms with higher free cash flow according to Jensen's criteria may have been more likely to lobby against its strict implementation. To categorize which firms are likely to meet Jensen's criteria, we calculate a number of measures of profitability and growth opportunities. First, we examine cash flows from assets in place relative to assets (hereafter ROA) as of the end of the fiscal year end that ends in 2001.<sup>16</sup> Following Richardson [2006], we define cash flow from assets in place as (Net cash flow from operating activities) - (Maintenance investment expenditure) + R&D expenditure. Lobbying firms across all three panels have significantly higher ROA, consistent with the notion that lobbying firms on average are more profitable than non-lobbyists. Second, we examine three measures of growth opportunities: (1) long-term earnings growth forecasts calculated as the average analyst forecast in Zacks for the firm using forecasts issued 2001; (2) the ratio of book-to-market equity; and (3) firm age, measured as the number of years since inclusion in the CRSP database. In all three panels, lobbyists exhibit significantly lower earnings growth forecasts than non-lobbyists. In contrast, book-to-market equity is not significantly different for lobbyists and non-lobbyists, with the exception of those firms lobbying against 'Corporate Responsibility' provisions. With respect to firm age, older firms may have fewer growth opportunities and may also have more entrenched management. Across all three panels, lobbyists are significantly older than non-lobbying firms. The results for profitability and growth opportunities are therefore consistent: firms whose insiders lobby against SOX are more profitable than non-lobbyists and have lower growth opportunities.

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<sup>16</sup>All accounting measures in our study are winsorized at the 5% and 95% levels. Our results are robust to other reasonable cutoffs.

Thus, they have more scope for insider misappropriation.<sup>17</sup>

Finally, we acknowledge that Jensen’s free cash-flow problem is a combination of high free cash flows, low growth opportunities and poor managerial incentives. Table III indicates that lobbying firms have significantly poorer governance as measured by the Gompers, Ishii and Metrick [2003] governance index, for which higher values indicate worse governance and greater managerial entrenchment. More generally, we note that poor managerial incentives are prevalent, especially among lobbying firms.<sup>18</sup> Specifically, using data from Compustat’s ExecuComp database for 2001, we can calculate the percentage of shares outstanding owned by the top 5 executives for each firm. As can be seen in Table III, the mean percentage of insider ownership for the set of firms lobbying against ‘Enhanced Disclosure’ is 1.4 percent, while the median is only 0.14 percent. For non-lobbyers, the mean percentage owned is 3.0 percent and the median is 0.3 percent.<sup>19</sup> These low executive ownership fractions suggest that for most firms high free cash and low growth opportunities imply a free cash-flow problem in the sense that executives bear only a very small fraction of the costs if cash is spent on projects that do not maximize shareholder value. It is important to note that this is the case even if an executive’s entire compensation is paid in stock. If a dollar is spent on perquisites for the lobbying firm’s executives, the mean group of executives bears only 1.4 percent of the cost, but enjoys all of the benefits. This calculation does not include incentives provided by options and other incentive pay, but the numbers are so dramatic that the main point is very likely to be similar with a more complete measure of incentives.

Table IV examines the industry composition of lobbying and non-lobbying firms, using the Fama-French 49-industry classification. Consistent with the characteristics documented in Table III, lobbying firms appear to be concentrated in mature industries such as Beer and Liquor, Con-

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<sup>17</sup>A concern is that lobbying firms have similar levels of agency problems as non-lobbyers and lobby simply because they have lower lobbying costs. While we are unable to control for differences in lobbying costs, the evidence presented above provides evidence that agency problems are indeed larger for lobbying firms.

<sup>18</sup>A possible concern that arises in the context of documenting a free cash-flow problem is that if a firm has high free cash flow, few growth opportunities, and weak governance, we might expect that the free cash flow would be spent in a wasteful manner, thus reducing the level of observed free cash flow. Note, however, that observed free cash flow can be expressed as (free cash-flow absent diversion) minus (diverted cash), and consider two firms, A and B, where Firm A has higher (free cash-flow absent diversion). Which firm will have the higher observed free cash flow? As long as the insiders of Firm A do not divert the entire difference in (free cash-flow absent diversion) between the two firms, we will see higher observed free cash flow for Firm A. Another way to address this concern is to look at free cash flows in the firm’s industry. In unreported results, we confirm that lobbyists are significantly more profitable than non-lobbyers even based on industry-average ROA. Furthermore, the difference between firm-level ROA and industry-average ROA is positively related to lobbying, consistent with our prior that insiders in Firm A from the example above do not divert the entire difference in (free cash flow absent diversion) between the two firms.

<sup>19</sup>The difference is driven mainly by the larger average size of lobbyists. Controlling for size, lobbying firms have lower percentages owned by executives, but not significantly so. We therefore do not include managerial ownership in our probit models below.

sumer Goods, Machinery, Automobiles and Trucks, Petroleum and Natural Gas, Utilities, Shipping Containers, Transportation and Wholesale. In addition, there is a concentration of lobbyists in the financial industries, likely resulting from ex-ante uncertainty as to whether SOX's provisions would be applied to firms in the financial sector.

To analyze the determinants of lobbying in a multivariate setting, we proceed to run probit regressions where the dependent variable is an indicator variable taking a value of one if the firm lobbied the SEC against a SOX-related provision, and zero otherwise. We estimate the probit models separately for each of the three major rule categories. Table V presents the results of the probit models for lobbying against the three types of SOX-related provisions. The first specification controls for size (using the natural logarithm of firm assets)<sup>20</sup>, ROA<sup>21</sup>, and the long-term earnings-growth forecast. The second specification adds industry indicator variables.

The univariate patterns seen in Table III hold in the multivariate setting as well. Size is a strong predictor of lobbying. A second strong predictor of lobbying is profitability; firms with higher ROA are significantly more likely to lobby, as are firms with low growth forecasts. In the last 3 columns of Table V, we repeat our probit models, this time including the Gompers, Ishii and Metrick [2003] governance index as an additional independent variable. We obtain a positive, significant coefficient on the governance index variable, suggesting that firms with poorer governance and more entrenched management are more likely to lobby against strict implementation of SOX, consistent with the improved governance and disclosure view.

Another approach to evaluating whether lobbying firms are more likely to be those with large agency problems is to study the relationship between lobbying and corporate scandals. Unfortunately, studying the relationship between SOX-related lobbying and pre-SOX scandals is uninformative, as the insiders of firms with pre-SOX accounting scandals have little credibility to lobby against reform. Studying the relationship between SOX-related lobbying and post-SOX scandals may or may not be informative, as SOX may force problematic firms to “clean up their act,” in which case one would not expect them to be more likely to be involved in scandals post-SOX. The viability of such an analysis would depend on the speed at which SOX is expected to change the behavior of affected firms. An analysis of this sort is further complicated by the lack of any

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<sup>20</sup>We employ assets rather than market capitalization, as we wish to have a measure of size that is independent of profitability, whereas market capitalization incorporates expectations of profitability.

<sup>21</sup>Similar results are obtained when we replace firm ROA with firm industry-adjusted ROA and control directly for industry-average ROA.

comprehensive dataset of corporate scandals for the post-SOX period.<sup>22</sup> Furthermore, we note that, ideally, what we would want to document is that *absent* SOX, lobbying would have predicted corporate scandals. In the absence of a counterfactual (i.e., a group unaffected by SOX), this is not possible.

One can use data on lobbying against pre-SOX reforms, however, to try to get at the counterfactual of what the relation between lobbying and internal control weaknesses or corporate scandals would be absent SOX. We obtain data from Kin Lo on lobbying against two prior disclosure and governance reforms in the early 1990s. The first of the two reforms is the 1992 reform of executive compensation disclosure studied by Lo [2003]. The reform mandated more stringent disclosure rules, including a summary compensation table that includes practically all forms of compensation, a comparison of pay and stock performance, and an explanation of incentive compensation by the compensation committee. This reform was proposed by the SEC in June of 1992, and adopted in October 1992. The second reform is the 1992 reform of proxy rules studied by Bradley, Brav, Goldstein and Jiang [2008].<sup>23</sup> This reform lifted restrictions on shareholder communication, making it easier for shareholders to initiate change through shareholder proposals. The reform was proposed by the SEC in June 1991, with an updated proposal in June 1992, and was adopted in October of 1992.<sup>24</sup>

Panel A of Table VI presents estimates from probit models similar to those presented in Table V, where the dependent variable is an indicator for lobbying against one or both of the two prior reforms. The estimates presented in the table suggest that, as is the case with SOX, firms lobbying the SEC against adoption of the two prior reforms were also large, profitable, low growth-opportunity firms with poor governance. More importantly, lobbying against the early 1990s pre-SOX reforms predicts later involvement in a scandal, as identified by a class action lawsuit that was not dismissed (as per data from Dyck, Morse and Zingales [2008]).<sup>25</sup> Panel B of Table VI presents estimates from

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<sup>22</sup>An examination of the correlation between lobbying against strict implementation of SOX and subsequent reporting of internal control weaknesses indicates a negative correlation between the two.

<sup>23</sup>Note that the reforms explored in Lo [2003] and Bradley, Brav, Goldstein and Jiang [2008] are not far-reaching broad reforms of the type mandated by SOX, but, rather, more specific reforms that would not necessarily have been expected to improve overall governance or disclosure quality for the firm dramatically. They therefore allow us to study the relationship between lobbying activity and subsequent scandal in the absence of broad mandated improvements to overall governance.

<sup>24</sup>Kin Lo's data file includes all firms that sent comment letters on these two reforms. Lo [2003] documents that for the 1992 executive-compensation-disclosure reform the vast majority of corporate letters are negative. We do not have a breakdown of the letters for the 1992 proxy reform but based on both Lo's findings for the executive-compensation-disclosure reform and our findings for SOX lobbying, it is likely that corporations who lobbied on this reform were also negative.

<sup>25</sup>The Dyck et al dataset covers firm with assets over \$750M, so the regressions in this panel are restricted to that

probit models where the dependent variable is an indicator for a corporate scandal, and the independent variable of interest is lobbying against past SEC-proposed reforms. We observe a significant, positive relationship between lobbying the SEC and the likelihood of a subsequent corporate scandal. Based on the second column in the panel, past lobbying is associated with a 2.4 percentage point higher probability of scandal (relative to a mean probability of 5.6 percent for the sample in the regression). Both these results lend further support to our argument that firms with higher likelihood of agency problems are those that also tend to lobby against improved governance and disclosure.

Despite this evidence, an alternative interpretation of our results is that lobbying firms are merely large, profitable firms that would be hurt less than non-lobbyers by compliance costs associated with SOX. Under this alternative interpretation, lobbying firms would be firms for whom the compliance costs imposed by SOX are the least burdensome. However, this argument runs counter to models of interest group behavior (see, e.g., Grossman and Helpman [1994] and Dewatripont and Tirole [1999]), which suggest that those trying to change a piece of legislation would be those most affected by it, not those least affected by it. If the main impact of SOX is increased compliance costs, and lobbying is rational, the lobbyists should be the firms for whom the compliance costs are the most burdensome, rather than those whom these costs hurt less. One way to deal with this concern is to verify that our subsequent return results are robust to the matching of lobbying firms to non-lobbying firms based on measures of size, profitability and growth opportunities.

## **C.2. Compliance Costs**

We can also use the characteristics of lobbying firms to test more directly the predictions of the compliance cost view, under which the most affected (identified as lobbying) firms, would be those with higher expected increases in compliance costs as a result of SOX implementation. Table VII presents the findings from an examination of audit fees for lobbying and non-lobbying firms. We obtain the audit-fee data from Audit Analytics. The results suggest that lobbying firms are unlikely to be lobbying due to a relatively larger expected increase in compliance costs due to SOX. The results in column (1) and (3) show that firms that lobby against the ‘Enhanced Disclosure’ provisions of SOX have, on average, lower audit fees relative to market value pre-SOX than do non-lobbying firms, and their audit fees relative to initial market value increase less, relative to non-lobbyers, in the post-SOX period. Firms that lobby against the remaining two categories of provisions do

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subset of firms.

not differ in relative audit costs as compared to non-lobbyers and are subject to similar increases as non-lobbyers in the post-SOX period. In column (2) and (4) we include indicator variables for propensity-score bins to compare lobbyers and non-lobbyers with equal probability of lobbying based on size, book-to-market equity and industry.<sup>26</sup> These regressions show that controlling for characteristics generally thought to be related to returns, lobbyers are no different than non-lobbyers in terms of initial audit fees to market value or audit-fee increase relative to initial market value.<sup>27</sup> This suggests that it is unlikely that lobbying is motivated by relatively larger expected increases in compliance costs.

Overall, the estimates from our analysis of agency costs and audit fees suggest that insiders in lobbying firms are those more likely to be concerned about a curtailing of their private benefits or other behaviors rather than those concerned about larger relative increases in compliance costs.

#### **D. Predictability of Lobbying by Corporate Insiders**

The analysis above indicates that lobbying by corporate insiders is predictable to some extent on the basis of ex-ante economic characteristics of firms. This suggests that market participants were able to predict, to some extent, which firms would be more affected by SOX. Our probit models of lobbying in Table V suggest a fairly substantial amount of predictability. Pseudo  $R^2$ s for the models range from 22.5% on the low end to 38.4% on the high end. It is likely that market participants had more detailed information about firm characteristics and, thus, that they were able to predict more accurately than our probit models which firms would lobby (or more generally, which firms would be more affected by SOX).

To further ascertain whether investors could indeed predict ex-ante who the lobbying firms would be, we supplement the probit results above with an event study of whether abnormal returns were observed around the submission date of a given company's letter (and posting of the letter on the SEC web page or accessibility of the letter in the SEC's public reference room).

We examine an event period of 21 weeks ( $[-10,+10]$ ) surrounding the submission of a letter to the SEC. If a firm wrote multiple letters (e.g., lobbying against more than one rule in a given category), we include an observation for each of the letters so long as there is no overlap of the 21-week event period  $[-10,+10]$ . When letter event periods for the same firm overlap, we use only the first of the overlapping letters. We examine two sets of abnormal returns: those with and

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<sup>26</sup>The bins are based on the propensity-score match that matches lobbyers against any rule to non-lobbyers.

<sup>27</sup>These results remain robust when scaling audit fees by assets rather than by market value.

without factor adjustment. For the returns with no factor adjustment, we first average the excess returns for lobbying firms relative to their matched portfolio of non-lobbying firms. This is done for each week in event time where date zero in event time is the week in which the letter was filed with the SEC. Average excess returns are then summed over time (in event time), starting 10 weeks before the event date and ending 10 weeks after the event date.<sup>28</sup> For the factor-adjusted returns, we follow the same approach, except that the excess return for a given lobbying firm relative to its group of matched non-lobbying firms is replaced by the residual from a regression (run on the post-SOX period from week 31 of 2002 to the end of 2004) of the excess returns on the market factor, size factor and book-to-market factor.<sup>29</sup> If the propensity-score matching succeeds in lining up each lobbying firm with a set of non-lobbying firms of very similar size, book-to-market and industry characteristics, then the average excess-return time series directly measures the abnormal performance of lobbyists. If the match is less accurate, more precise measures of the abnormal part of any over- or under-performance of lobbyists can be obtained by estimating a factor model and analyzing the residuals from such a model around the date of submission of a lobbying letter. To the extent that results differ depending on whether a factor model is used, one would expect those from the factor model to be the most accurate.

We perform our return analysis using weekly data as opposed to daily data to avoid any potential biases in factor loadings due to differential liquidity of the stocks of lobbying and non-lobbying firms.<sup>30</sup> Figure 2 illustrates the findings of our event study and includes results for all three major rule categories. The graphs show results for abnormal returns measured relative to a group of non-lobbying firms constructed on the basis of 20 propensity score bins. If lobbying was not predictable by the market, we would expect to see a positive or negative reaction to the submission of a letter. Figure 2 reveals no such reaction, suggesting that market participants were not surprised to learn which firms lobbied.

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<sup>28</sup>We omit letters filed within the first 10 weeks of SOX passage so that our event study is not affected by the news of SOX passage itself.

<sup>29</sup>The market factor is the excess return of stocks over T-bills. The size factor is the excess return of a portfolio of small stocks over a portfolio of large stocks. The book-to-market factor is the excess return of a portfolio of high book-to-market stocks over a portfolio of low book-to-market stocks. We run only one regression to obtain the residuals, as opposed to one regression for each lobbying firm. Thus, we implicitly impose equal factor loadings for all lobbyists (over and above their matched non-lobbyers).

<sup>30</sup>We calculate the weekly market factor (MKT), size factor (SMB), and book-to-market factor (HML) by summing daily factor data obtained from Ken French's web page.

## E. Returns in the Period Leading up to Passage of the Sarbanes-Oxley Act

We now turn to the comparison of returns for lobbying and non-lobbying firms. Under the improved disclosure and governance hypothesis, returns should be larger for lobbying firms than for non-lobbying firms during the period leading up to passage of SOX. The compliance-cost view of SOX has the opposite prediction.

### E.1. Portfolio-Level Returns

We first calculate the weekly average portfolio returns for non-lobbyers within each of the propensity score bins. We then calculate the average weekly excess return for lobbying firms over and above their matched non-lobbying firm portfolio as

$$\frac{1}{N_t} \sum_{i=1}^{N_t} (r_{i,t}^{Lobby} - r_{p,t}^{Non-Lobby}),$$

where  $r_{i,t}^{Lobby}$  is the return on lobbying firm  $i$ 's stock in week  $t$ ,  $N_t$  is the number of lobbying firms for which returns are available for week  $t$ , and  $r_{p,t}^{Non-Lobby}$  is the average weekly return in week  $t$  on the portfolio of non-lobbying firms matched to firm  $i$ .

We present both the results which do not use a factor model and the results which use a 3-factor model which regresses the excess return of lobbyists on the weekly market factor (MKT), size factor (SMB), and book-to-market factor (HML):

$$\frac{1}{N_t} \sum_{i=1}^{N_t} (r_{i,t}^{Lobby} - r_{p,t}^{Non-Lobby}) = \alpha + \beta_{MKT} r_{MKT,t} + \beta_{SMB} r_{SMB,t} + \beta_{HML} r_{HML,t} + \epsilon_{i,t},$$

where  $\epsilon$  is an error term. In this model, the intercept ( $\alpha$ ) measures the average abnormal weekly excess return of lobbyists over non-lobbyers and is our main object of interest.

Table VIII presents the estimates of abnormal performance of lobbyists relative to non-lobbyers during the 24-week period leading up to passage of SOX, beginning in week 7 of 2002 and ending in week 30 of 2002 (February 8, 2002 to July 26, 2002). Panel A shows strong evidence of *positive* abnormal returns for firms whose insiders lobbied *against* one of the 'Enhanced Disclosure' provisions, relative to their matched sample of non-lobbyers. Without factor controls, the weekly  $\alpha$  in column (1) is 0.0029, corresponding to a total abnormal return for such lobbyists of 6.96 percent over the 24-week period leading up to SOX passage. The  $\alpha$  is statistically significantly different from zero at the five percent level. Results are similar when a factor model is used. A potentially important issue with the factor model is that if we were to estimate the factor loadings using only 24 weeks of data, this could lead to overfitting and corresponding downward small-sample bias in

the estimated abnormal excess return ( $\alpha$ ). Instead, we use the full time period from week 7 of 2002 to the end of 2004 and allow for different  $\alpha$  for the period leading up to SOX passage and the post-passage period. Column (2) presents the model using data from the entire sample period, without factor adjustment, and column (3) presents the factor model estimated using data from the entire sample period. The  $\alpha$  from the factor model in column (3) implies a total abnormal return for such lobbyists of 6.24 percent over the 24-week period leading up to SOX passage.<sup>31</sup>

The top graph in Figure 3 illustrates the cumulative abnormal returns over time for firms that lobbied against an ‘Enhanced Disclosure’ provision of SOX, based on the portfolio-level returns described above. Two lines are shown. The unadjusted cumulative excess return, labeled “No Factor Adjustment,” is calculated by averaging the excess returns over the comparison group across lobbying firms in each week and then summing these average excess returns over time, starting with week 7 of year 2002. The factor-adjusted cumulative excess return, labeled “With Factor Adjustment,” is calculated by first regressing the average weekly excess return over the comparison group on the excess return on the market and the Fama-French size and book-to-market factors. The regression is run using weekly data from week 7 of 2002 until the end of 2004, and the intercept ( $\alpha$ ) plus the residuals are averaged each week and then summed over time. The two vertical lines indicate the beginning and end of the 24-week period leading up to SOX passage. It is striking how the abnormal performance of lobbying firms relative to non-lobbying firms ends right around the time of the passage of SOX. This pattern further reassures us that we are indeed measuring the impact of the law on lobbying firms.

The remaining two panels of Table VIII repeat our portfolio regressions, focusing on firms that lobbied against a ‘Corporate Responsibility’ or ‘Auditor Independence’ rule. Here, the evidence for abnormal positive excess returns for lobbying firms relative to their matched non-lobbying firms is statistically weaker than for firms that lobbied against an ‘Enhanced Disclosure’ rule, though the magnitudes of the coefficients are similar.

Interpreting the portfolio-level results presented in Table VIII is not straightforward. Over 40 percent of the firms that lobbied against an ‘Auditor Independence’ provision also lobbied against at least one ‘Enhanced Disclosure’ provision, and 37 percent of firms that lobbied against a ‘Corporate Responsibility’ provision also lobbied against at least one ‘Enhanced Disclosure’ provision. To address this issue, we proceed to estimate the separate abnormal returns associated with each of

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<sup>31</sup>We discuss the  $\alpha$  for the post-passage period below.

the three major rule categories by running firm-level return regressions.

## E.2. Firm-Level Returns

We run firm-level (as opposed to portfolio-level) regressions of the following form:

$$\begin{aligned} \sum_{t=1}^T (r_{i,t}^{Lobby} - r_{f,t}) &= \delta_0 + \gamma_1 I(\text{Lobbied Against Enhanced Disclosure Rules}) \\ &+ \gamma_2 I(\text{Lobbied Against Corporate Responsibility Rules}) \\ &+ \gamma_3 I(\text{Lobbied Against Auditor Independence Rule}) + X_i' \beta + u_i, \end{aligned}$$

where  $I(\cdot)$  indicates a dummy variable,  $\delta_0$  is an intercept term,  $X$  is a set of control variables and  $u_i$  is an error term. The regression is run on the full set of firms, i.e. including both lobbyists and non-lobbyists, and has one data point per firm. In regressions (1), (2), and (3) of Table IX, Panel A, the dependent variable is the sum of the weekly excess returns over the riskless rate during the period leading up to SOX passage. The regression coefficient  $\gamma$  on the dummy variable for a particular type of lobbying estimates how much the cumulative weekly excess return during the period differs between that group of lobbying firms and a typical non-lobbying firm. To control for differences between lobbying and non-lobbying firms along size, book-to-market, and industry dimensions, and for similarity to the portfolio-level analysis presented in Table VIII, we include indicator variables for 20 propensity-score bins, where the bins are calculated using the propensity-score matching which does not differentiate between lobbying for one or another category (but rather calculates the predicted probability of lobbying against any provision of SOX).

Consistent with the statistical significance levels in our portfolio-level findings, column (1) of Table IX indicates that the market expected SOX to benefit the firms most affected by its ‘Enhanced Disclosure’ provisions (as evidenced by their lobbying activity), with little to no added shareholder value for the firms most affected by its ‘Corporate Responsibility’ or ‘Auditor Independence’ provisions. The abnormal excess return for firms lobbying against an ‘Enhanced Disclosure’ rule captured by the  $\gamma_1$  coefficient indicates a total abnormal excess return for the lead-up period of 7.97 percent. These effects are comparable (theoretically, and in magnitude) to the effects estimated based on the  $\alpha_{\text{Lead-Up}}$  coefficient in portfolio-level analysis. The  $\gamma_2$  coefficient on lobbying against a ‘Corporate Responsibility’ rule indicates little abnormal excess return (economically or statistically) for the lead-up period across the three regressions. The  $\gamma_3$  coefficient on lobbying against the ‘Auditor Independence’ rule indicates a total abnormal excess return for the lead-up period of approximately 2 percent, but with no statistical significance at conventional levels.

In sum, the results of Tables VIII and IX support the positive view of SOX and suggest that investors expected the legislation to increase shareholder value. These results are consistent with our findings regarding the economic determinants of lobbying, which suggest that lobbying firms are those characterized by free cash-flow agency problems. In particular, the return results indicate that firms most affected by the ‘Enhanced Disclosure’ provisions of SOX (as evidenced by their lobbying) experienced positive abnormal excess returns of around 7 percent during the period leading up to SOX passage relative to less affected (non-lobbying) firms with similar size, book-to-market and industry characteristics. There is little effect experienced by the firms most affected by the ‘Corporate Responsibility’ and ‘Auditor Independence’ rules.

### **E.3. Robustness**

We conduct a number of robustness tests to augment our return results.

**Pooling Lobbying Firms Across All Categories:** Since the SOX titles were passed as a complete package, and any categorization is likely to be at least somewhat arbitrary, we conduct a robustness check and re-estimate our firm-level return models without distinguishing between lobbying against the three different categories of rules. For brevity, we do not report the results in a table. Consistent with Table IX, where we distinguish between lobbying against the different categories of rules, we observe that firms lobbying against any category of SOX rules experienced abnormal excess returns relative to less affected (non-lobbying) firms with similar size, book-to-market and industry characteristics during the period leading up to SOX passage. The full pool of lobbying firms experienced an abnormal excess return of 6.74 percent ( $t=3.38$ ) over the 24 week period leading up to the passage of SOX.

**Matching on Size, Profitability and Growth Opportunities:** Our return results, both at the portfolio- and at the firm-level, are robust to propensity-score matching directly on size (assets), profitability (ROA), growth opportunities (either firm age or analyst long-term growth forecasts) and industry. In other words, lobbyists outperform non-lobbyists in the lead-up period even when controlling directly for size, profitability and growth opportunities. The main return effect for the lead-up period for lobbying against ‘Enhanced Disclosure’ (Table IX, column (1)) changes from 7.97 percent, with our baseline match, to 6.70 percent ( $t=2.77$ ) with matching on assets, ROA and firm age, and 6.03 percent ( $t=2.47$ ) with matching in assets, ROA and analyst long-term growth

forecasts.<sup>32</sup> These results help alleviate any remaining concerns that our results stem from lobbying firms being simply larger and more profitable and therefore hurt less by SOX.<sup>33</sup>

**Omitting Corporate Scandal Firms:** Our sample contains a number of firms that experienced a corporate scandal in the pre-passage period (e.g., Worldcom). There are two ways in which the timing of corporate scandals may affect our results. The first is innocuous: if news of a corporate scandal galvanized Congress and the SEC to move forward with reforms, it does not affect our analysis. It simply increases the probability of SOX being passed, and any differential returns between lobbying and non-lobbying firms are still attributable to SOX.

The second possibility is less innocuous. If a firm that experienced a corporate scandal experienced a dramatic decrease in stock price and was included in the group of matched non-lobbyers, it is possible that this decline in price could drive the lower returns of the non-lobbying group, without the lower returns being attributable to SOX. To address this, we repeat our analysis, dropping all firms (lobbyers and non-lobbyers) who were involved in accounting scandals during the 24-week period leading up to SOX passage.<sup>34</sup> There are 66 such firms, of which 57 did not comment on any of the SOX rules. After omitting scandal firms, the top graph of Figure 3 (for firms lobbying against ‘Enhanced Disclosure’) remains similar to that employing the full sample. Under the adjustment, we obtain a total cumulative excess return for lobbying firms of around 5 percent, based on the portfolio analysis. Our firm-level analysis results in firms lobbying against ‘Enhanced Disclosure’ outperforming the (updated) control group by 6.75 percent ( $t=2.86$ ) during the lead-up period, as compared to 7.97 percent ( $t=3.39$ ) in our baseline firm-level estimation in Table IX. Overall, our finding of excess returns for lobbyers is robust to omitting firms with scandals during the lead-up period (from both the set of lobbyers and the set of non-lobbyers).

**Returns Surrounding Probability-Changing Events:** During the course of the pre-passage period, a number of events occurred which likely affected the probability of SOX passage in Congress. There are a number of papers that discuss these events (Zhang [2007], Li, Pincus and Rego [2008], Jain and Rezaee [2006]). However, as discussed in Leuz [2007], there is little agreement

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<sup>32</sup>The slightly smaller effects with the alternative match are to be expected, since matching directly on the variables that drive lobbying, as predicted by agency theory, identifies the effect of lobbying controlling for the part of the free cash-flow problem which can be measured by observables.

<sup>33</sup>This finding is not surprising given that our baseline propensity-score matching matches firms on standard variables used in the asset-pricing literature to control for differences in size, profitability and growth opportunities.

<sup>34</sup>We identify these firms as those included in the data set of Dyck, Morse and Zingales [2008], for whom the authors classify the scandal as being ongoing during the 24-week period leading up to SOX passage (i.e., the scandal began before the end of the 24-week period and ended after the start of the 24-week period).

between these papers as to what the right set of dates are or even whether a given date should be associated with an increase in the probability of passage or the severity of the disclosure and governance requirements to be imposed. That said, there seems to be agreement that the probability of passage and, according to some of the authors, the severity of the requirements increased in the last few days before SOX was passed in the Senate and House on July 25th. We therefore define our first sub-period of interest to be the two-day period of July 24th and 25th, 2002.

Additionally, on June 25th, after the end of trading, Worldcom admitted that they had inflated EBITDA by approximately \$3.8B and would be forced to restate financials and possibly file for bankruptcy. Worldcom stock was not traded on June 26, 27 and 28, and its stock price closed at 6c per share on July 1, down from 83c on June 25. It is largely agreed upon that the Worldcom scandal increased the likelihood that SOX (or a similar reform package) would ultimately be passed by Congress.<sup>35</sup> We therefore define our second sub-period of interest as the four-day period of June 26 to July 1, 2002.

Finally, given that we find the largest return impact for SOX's 'Enhanced Disclosure' provisions, other dates of likely significance are those related to news about the formation of the PCAOB. Sarbanes' bill, which included an oversight board, passed in the Senate on June 18 (before the end of trading). Jain and Rezaee [2006] note that the SEC proposed the creation of an oversight board on June 20 (the SEC vote also took place before the end of trading). We therefore define our third and fourth sub-periods of interest as the one-day periods of June 18 and 20, respectively.

We rerun our firm-level regressions for these four event periods prior to SOX passage, replacing weekly returns with the event returns for the sub-periods in question. The results are presented in Table X. The four events likely increased the probability of SOX passage or PCAOB formation. Consistent with our findings for the entire pre-passage period, we find significant abnormal returns, ranging from 0.32 percent to 0.94 percent across the different sub-periods, for firms lobbying against strict implementation of 'Enhanced Disclosure' provisions (above and beyond those of matched non-lobbyists) surrounding these events, but no significant abnormal returns for firms lobbying against 'Corporate Responsibility' or 'Auditor Independence' provisions.

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<sup>35</sup>Factiva documents over 1000 articles mentioning Worldcom on June 25 and June 26, suggesting that this was considered a major news event for Worldcom.

## F. Returns During the Period Following Passage of the Sarbanes-Oxley Act

From Figure 3, it is apparent that firms lobbying against one or more of the SOX ‘Enhanced Disclosure’ rules had returns during the post-SOX period that were fairly similar to those of their matched comparison group of non-lobbying firms. Tables VIII and IX confirm this result. Columns (2)-(3) of Table VIII estimate the portfolio-level excess return regressions on the full period from week 7 of 2002 to the end of 2004, with separate intercepts ( $\alpha$ ) for the lead-up period and the post-passage period. In Panel A, which concerns ‘Enhanced Disclosure,’ the intercept for the post-passage period,  $\alpha_{\text{Post}}$ , is consistently close to zero in both economic and statistical terms. Similar results obtain in column (2) of Table IX: the  $\gamma_1$  regression coefficient of the dummy variable that is set equal to one for firms that lobbied against an ‘Enhanced Disclosure’ rule is close to zero (economically and statistically). These findings indicate that the returns for firms that lobbied against an ‘Enhanced Disclosure’ rule were similar to the returns for their non-lobbying comparison group of firms in the post-passage period, and thus that the increase in (relative) stock prices experienced by lobbying firms in the pre-passage period did not tend to reverse during the post-passage period. These findings suggest that the positive expectation of shareholders evidenced by their letters to the SEC and by returns in the pre-passage period were indeed warranted.

It is widely acknowledged that the compliance costs associated with SOX have been higher than initially expected. In June 2003, the SEC estimated the aggregate annual cost of implementing Section 404 alone at approximately \$1.24 billion, or \$91,000 per registrant. In January 2004, Financial Executives International (FEI) completed the first of a string of surveys estimating the cost of SOX, and of Section 404 in particular. The survey placed the expected annual average total cost of SOX compliance at approximately \$1.93 million per company. Expected costs appeared to increase along with firm size, with expected total compliance costs for larger firms (over \$5 billion in annual revenues) of \$4.6 million per company. A first follow-up survey by FEI in June 2004 raised these estimates to \$3.15 million and \$8 million per company, respectively. A second follow-up survey by FEI in March of 2005 raised the estimates to \$4.36 million and \$10 million, respectively. Finally, in March of 2006 another FEI survey estimated the expected average total cost of SOX compliance at \$3.8 million and at \$10 million for larger firms.

Our analysis of the post-passage period incorporates the effects of increases (up to the end of 2004) in expected compliance costs. The lack of a difference in returns between firms lobbying against ‘Enhanced Disclosure’ and their matched non-lobbyers suggest that any revisions of

compliance-cost estimates (relative to market value) were similar for the two groups of firms. Moreover, we can utilize the compliance cost estimates provided by FEI to explicitly calculate estimates of compliance costs for the full set of public firms and compare it to the benefit implied by our returns analysis.

## IV. Interpretation and Discussion

### A. Costs and Benefits to Shareholders

Our results suggest that shareholders of lobbying firms, in particular those firms lobbying against provisions of SOX related to ‘Enhanced Disclosure,’ experienced positive abnormal excess returns during the period leading up to the passage of the Act on the order of 7 percent, relative to non-lobbying firms with similar size, book-to-market and industry characteristics. An obvious shortcoming of a research design that compares the returns of more affected firms to less affected firms, without having a comparable group of firms unaffected by the legislation studied, is that it identifies the *difference* in net benefits for the more and less affected groups, but not the *level* of net benefits for either group.

By utilizing information about compliance costs, however, it is possible to estimate the level of net benefits for the set of lobbying firms, as well as for the full set of public firms. While we emphasize that this analysis is only as good as the compliance-cost data available, the methodology we lay out below can be useful more generally, as it allows the researcher to use the lobbying methodology while circumventing the issue of only speaking to relative effects of a law on two groups of firms. Here, we utilize data from the March 2006 Financial Executives International (FEI) survey of 274 financial executives regarding their experiences in complying with SOX Section 404. The survey reports that the average annual total cost of SOX compliance was approximately \$3.8 million per company. Panel A of Table XI reports results from the survey, broken down by size of firm as determined by revenues. The estimates from the survey reported in the table indicate that average costs increase with firm size, with expected total compliance costs for the largest firms (over \$25 billion in annual revenues) at \$12 million per year. When combined with our evidence on the cumulative excess returns of lobbying over non-lobbying firms, this survey evidence on SOX compliance costs can be used to estimate the *level* of the net benefit of SOX to shareholders in lobbying firms, as well as in the full set of firms.

We start by making the assumption that compliance costs were similar for lobbying firms and

for non-lobbying firms of similar size, book-to-market and industry characteristics. Our previous finding of a lack of differences across lobbying firms and propensity-score matched non-lobbying firms with regard to the change in audit fees from 2001 to 2004 (relative to market value), provides support for this assumption. Furthermore, we make the conservative assumption that there was absolutely no gross benefit from SOX for non-lobbying firms. Under these two assumptions, the cumulative difference in the returns of the two sets of firms in the period leading up to SOX passage captures not only the difference in the net benefit to shareholders between the two groups of firms, but also the gross benefit of SOX for the set of lobbying firms. We thus estimate the gross benefit of SOX for the set of firms lobbying against an ‘Enhanced Disclosure Rule’ to be around 7% of the initial market value of these firms.

It is unlikely that the present value of SOX compliance costs for lobbying firms is as high as 7 percent of these firms’ initial market value. We present our calculations underlying this point in Panel B and C of Table XI. For each lobbying firm, we assign the compliance cost average associated with its FEI sales category.<sup>36</sup> The third row of Table XI, Panel B, shows that the total annual compliance cost for the set of firms lobbying against an ‘Enhanced Disclosure Rule’ is around \$1.0 billion, corresponding to only 0.031 percent of their total initial market value. Using a discount rate of 10 percent, the present value of these lobbying firms’ compliance costs is only 0.31 percent of market value, which is much smaller than the estimated gross benefit of 7 percent of market value. This suggests that we can be relatively confident that shareholders of firms lobbying against an ‘Enhanced Disclosure Rule’ benefited substantially from SOX, with a net benefit of around 6.7 percent of market value. Table XI, Panel C shows that this corresponds to a dollar net benefit for these firms’ shareholders of around \$220 billion (using the 10 percent discount rate for the PV calculation).<sup>37</sup>

Under our two assumptions, the total benefit to shareholders from SOX is the gross benefit of SOX for lobbying firms, which is approximately \$230 billion in total. We utilize the compliance-cost data presented in Panel A of Table XI to calculate the sum total of compliance costs for all firms, lobbyists and non-lobbyists, by assigning each firm the compliance-cost number associated with the FEI sales category that its sales fell into in 2001. We then sum the compliance costs across

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<sup>36</sup>To estimate compliance costs for firms with no sales data, we regress compliance costs on the log of market capitalization and its square for firms that do have sales data available. We then use the resulting regression estimates to predict compliance costs for those firms with no sales data.

<sup>37</sup>Our return estimations are all done weighting each lobbying firm equally. We checked whether our return results are similar for large and small lobbying firms, finding no tendency for the return results to be stronger or weaker for larger lobbying firms than for smaller lobbying firms.

firms. The total estimated annual compliance costs for the full set of US publicly-traded firms is approximately \$13.9 billion.<sup>38</sup> Panel C of Table XI presents the present value of these costs, using discount rates of 5, 10, and 15 percent. Under the most conservative scenario, where we employ a discount rate of 5 percent, the present value of compliance costs exceed the \$230 billion gross benefit by \$47 billion. At a discount rate of 10 percent, on the other hand, the net benefit of SOX across the full set of companies is approximately \$92 billion. These calculations suggest that given the FEI cost estimates, with even a small positive gross benefit of SOX for non-lobbyers, the net benefit of SOX for the overall US stock market could be substantial.

Interpretation of these numbers must be nuanced. First, we note that interpretation of these numbers hinges critically (a) on our ability to interpret the return differential between lobbying and non-lobbying firms as the difference in the gross benefit of SOX for these two sets of firms, and (b) on the quality of the compliance cost estimates. A second caveat is that our calculations cannot account for loss of shareholder welfare due to the decisions of some previously public companies to de-list or to deregister with the SEC due to the burdens of SOX regulation, nor can it account for any welfare loss resulting from the decisions of private companies to remain private or to go public on non-US exchanges (see Engel et al [2007], Leuz et al [2008], and Zingales [2007]). In addition, we cannot rule out that insiders lost an amount equal to or greater than what outside investors gained. Finally, it is important to note that the lobbying firms in our sample are predominantly large, established organizations and, thus, our returns analysis does not provide specific conclusions as to the effect of SOX on smaller firms.

## **B. Mechanism**

There are three primary channels through which SOX may have increased shareholder value. First, SOX may have directly improved the operating performance of the firm through the elimination of management ineptness, complacency or the improvement of operations as a result of lessons learned during the internal control review. Second, SOX may have improved operating performance through the elimination of actual expropriation or perquisite consumption on the part of managers who are now subject to greater disclosure and transparency. Finally, SOX may have led to a lower cost of capital via an increase in shareholder confidence. As shown in Guiso et al [2008], when the average

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<sup>38</sup>Some lobbying groups, in particular AeA (formerly the American Electronics Association), using their own internal estimates in addition to FEI data, suggest that total annual compliance costs for SOX will be higher, or approximately \$29-\$35B. These groups tend to build these estimates using a per-firm cost estimate taken as the FEI estimate for large firms, rather than assigning each firm the cost estimate appropriate to its size.

level of trust in the stock market is low, for any given level of returns, investors are more reluctant to invest. Furthermore, when confidence is higher, the rate of return demanded by investors is lower (Giannetti and Koskinen [2008]).<sup>39</sup>

Ideally, we would like to test directly for the operative mechanism(s). However, the nature of SOX makes this difficult. One would not expect the *firm characteristics* associated with agency problems to change dramatically over a short period of time, even if governance improves immediately. For example, for a firm that, pre-SOX, had high free cash flow and poor growth prospects, one would not expect SOX to reduce profitability or to improve growth prospects on an immediate basis. Rather, the impact of SOX is likely to be an improvement in what is done with the free cash flow. For example, if SOX leads to an improvement in internal controls, it may be harder for corporate insiders to spend corporate resources on activities that do not maximize shareholder value. An improvement in internal controls, however, would not make a firm with high profits and low growth opportunities into a firm with lower profits and better growth opportunities.

To test whether improved internal controls were the mechanism through which SOX worked, we would need data on either measures of internal controls both pre- and post-SOX or a more direct measure of the amount of resources diverted by insiders pre- and post-SOX. The latter is by its very nature unobservable, and data collection on internal control weaknesses and similar variables began only after SOX.

The fact that lobbying firms have characteristics indicating likely free cash-flow agency problems suggests that both of the first two channels are likely to be operative. It is also worth noting that our lobbying analysis allows us to separately study different SOX provisions, and thus provides evidence on the more effective sections of SOX (the ‘Enhanced Disclosure’ provisions), even if it does not specifically pin down the mechanism through which they are effective.

Finally, a third possibility is that SOX may also have led to an increase in shareholder confidence that is reflected in a lower cost of capital. A useful exercise is to attempt to ascertain the extent to which investor confidence has improved since passage of SOX. UBS/Gallup conducts an Index of Investor Optimism Poll, which provides an indication of investor confidence over the period spanning the passage and implementation of SOX. In May 2002, 60% of respondents to the poll indicated that questionable accounting practices in business hurt the investment climate in the U.S. “a lot.” By May 2006, that percentage had dropped to 39%. Causal interpretation of such survey

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<sup>39</sup>SOX may also have lead to a lower cost of capital via a decrease in information asymmetries between insiders and outside investors, and a resulting increase in stock liquidity (see e.g., Diamond and Verrecchia [1991]).

evidence is, of course, not possible.

## V. Conclusion

In this paper, we evaluate the impact of SOX on shareholders by analyzing the SOX-related lobbying behavior of corporations, individuals and organizations. We classify the rules on which the SEC solicited comments into three major categories: those related to ‘Enhanced Disclosure,’ those related to ‘Corporate Responsibility,’ and those related to ‘Auditor Independence.’ We then examine the comment letters sent to the SEC during the drafting of the final SOX rules.

We document that individual investors, as well as large investor groups such as pension funds and labor unions, were overwhelmingly in favor of the SOX provisions they commented on, which speaks to shareholders’ perceived value of the legislation. In contrast, our reading of letters to the SEC by corporate insiders reveals that an overwhelming majority of insiders in lobbying companies opposed the SOX provisions they commented on. We then use lobbying by corporate insiders to further distinguish between two views of SOX: the view that SOX improves governance and disclosure, and the view that SOX will not be beneficial due to high compliance costs outweighing any potential benefits.

Our results suggest that lobbying firms were firms that ex-ante were characterized by traits that suggest that they were more likely to suffer from free-cash-flow-related agency problems (legal or illegal), and less likely to be firms primarily concerned with large increases in compliance costs as a result of SOX. Similarly, our study of returns reveals that during the 24-week period leading up to the passage of SOX, cumulative returns were approximately 7 percent higher for corporations whose insiders lobbied against an ‘Enhanced Disclosure’ provision of SOX than for non-lobbying firms with similar size, book-to-market and industry characteristics. These results lend support to the improved disclosure and governance view of SOX. Our analysis of the relative returns for lobbyists and non-lobbyists in the post-passage period suggest that investors’ positive expectations for SOX in the pre-passage period were warranted, since there is no evidence of differential returns between lobbyists and non-lobbyists in the post-passage period.

In sum, our findings from analysis of returns and reading of comment letters suggest that investors had overwhelmingly positive expectations about the effects of SOX, in particular those provisions related to ‘Enhanced Disclosure.’ These expectations appear to have been warranted, despite debates regarding implementation of the rules and unexpected increases in actual compliance

costs. Our results are consistent with the view that SOX would lead to improved disclosure, transparency and corporate governance, thereby reducing misconduct and mismanagement by insiders, and that for shareholders overall, these benefits may outweigh the costs of compliance.

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Table I:

### Opinions of Commenters, by Rule and Type of Commenter

The table reports the number of letters sent to the SEC and the opinions expressed in those letters for rules issued under the Sarbanes-Oxley Act and for the NYSE/NASDAQ corporate governance rules for which comments were solicited by the SEC, as well as for one SEC disclosure rule issued during this period but not directly related to SOX. The first panel presents the overall counts across all rules. Rules are then sorted into those that concern Auditor Independence (related to SOX Title II), Corporate Responsibility (related to SOX title III), and Enhanced Financial Disclosure and PCAOB (related to SOX Title IV and SOX Title I). The title of the rule (underlined) refers to the SEC initial proposal for each specific rule. For each rule we report the number of letters sent to the SEC and classify them by whether the letter is positive, neutral, or negative on the particular rule commented on. The neutral category includes letters that are positive on some, but negative on other sub-provisions, as well as letters that cannot be classified due to insufficient information. We classify commenters into the following categories: Corporations (including letters from a top manager or director), non-investor groups (e.g., business associations), investor groups (e.g., pension funds, asset management firms and foundations), individuals (excluding lawyers and accountants), accountants (associations, accounting firms, and individual accountants), lawyers (associations, law firms, and individual lawyers), academics, and other (e.g., religious organizations, government representatives, and elected officials). When available, we report, in bracket parenthesis, the SOX Section corresponding to the proposal.

45

Commenter:	Total Letters Commenting on All Rules							
	Corporation	Non-Investor Group	Investor Group	Individual	Accountant	Lawyer	Academic	Other
No. of Letters	629	216	125	240	242	367	51	78
No. Pos/Neu/Neg	45/74/510	35/24/157	104/9/12	189/21/30	47/24/171	29/33/305	30/10/11	35/8/35
Pct. Pos/Neu/Neg	7/12/81	16/11/73	83/7/10	79/9/13	19/10/71	8/9/83	59/20/22	45/10/45
<b>Total Letters Commenting on All Rules Directly Related to SOX</b>								
No. of Letters	585	186	61	175	238	342	46	48
No. Pos/Neu/Neg	39/68/478	27/15/144	46/6/9	130/19/26	44/24/170	24/30/288	26/10/10	8/6/34
Pct. Pos/Neu/Neg	7/12/82	15/8/77	75/10/15	74/11/15	18/10/71	7/9/84	57/22/22	17/13/71
<b>Totals Letters Commenting on Rules on Enhanced Disclosure [SOX Titles IV and I]</b>								
No. of Letters	379	114	65	113	64	109	15	38

continued on next page

<b>Commenter:</b>	<b>Corporation</b>	<b>Non-Investor Group</b>	<b>Investor Group</b>	<b>Individual</b>	<b>Accountant</b>	<b>Lawyer</b>	<b>Academic</b>	<b>Other</b>
No. Pos/Neu/Neg	18/53/308	20/14/80	54/3/8	89/8/16	17/14/33	8/9/92	6/5/4	29/4/5
Pct. Pos/Neu/Neg	5/14/81	18/12/70	83/5/12	79/7/14	27/22/52	7/8/84	40/33/27	76/11/13
Break-Down of Letters Submitted on Enhanced Disclosure Rules:								
Disclosure in Management's Discussion and Analysis of Critical Accounting Policies								
No. of Letters	40	13	6	6	6	5	2	0
No. Pos/Neu/Neg	1/2/37	2/0/11	4/1/1	1/2/3	0/0/6	0/0/5	0/1/1	0/0/0
[SOX Section 401: Disclosure in Periodic Reports]								
Disclosure in Management's Discussion and Analysis of Off-Balance Sheet Arrangements								
No. of Letters	14	9	2	7	7	9	0	2
No. Pos/Neu/Neg	0/0/14	2/0/7	1/1/0	7/0/0	0/1/6	0/1/8	0/0/0	1/1/0
[SOX Section 401: Disclosure in Periodic Reports]								
Conditions for Use of Non-GAAP Financial Measures								
No. of Letters	53	14	4	5	7	13	0	2
No. Pos/Neu/Neg	2/27/24	1/2/11	1/1/2	4/0/1	1/4/2	0/2/11	-	1/0/1
[SOX Section 401: Disclosure in Periodic Reports]								
Mandated Electronic Filing and Website Posting for Forms 3, 4 and 5								
No. of Letters	9	4	2	1	1	5	0	0
No. Pos/Neu/Neg	0/8/1	1/3/0	2/0/0	1/0/0	0/1/0	1/4/0	-	-
[SOX Section 403: Disclosures of Transactions Involving Management and Principal Stockholders]								
Disclosure Required by Sections 404, 406 and 407 of the Sarbanes-Oxley Act of 2002								
No. of Letters	132	39	3	20	16	33	5	5
No. Pos/Neu/Neg	4/4/124	2/5/32	2/0/1	9/4/7	3/4/9	0/2/31	2/1/2	0/1/4
[SOX Section 404: Management Assessment of Internal Controls]								
[SOX Section 406: Code of Ethics for Senior Financial Officers]								
[SOX Section 407: Disclosure of Audit Committee Financial Expert]								
Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date								
No. of Letters	44	12	4	4	7	14	2	2
No. Pos/Neu/Neg	4/1/39	5/1/6	4/0/0	4/0/0	0/0/7	1/0/13	0/1/1	2/0/0

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<b>Commenter:</b>	<b>Corporation</b>	<b>Non-Investor Group</b>	<b>Investor Group</b>	<b>Individual</b>	<b>Accountant</b>	<b>Lawyer</b>	<b>Academic</b>	<b>Other</b>
[SOX Section 409: Real-Time Issuer Disclosures]								

Form 8-K Disclosure of Certain Management Transactions

No. of Letters	56	11	6	14	0	16	2	0
No. Pos/Neu/Neg	3/5/48	1/1/9	5/0/1	10/1/3	-	1/0/15	1/1/0	-

[Earlier SEC rule likely replaced by the SOX rule above.]

Letters Commenting on Other Disclosure Related SEC Rules (Not Part of SOX Itself):

Disclosure Regarding Nominating Committee Functions And Communications Between Security Holders and Boards of Directors

No. of Letters	15	9	38	56	3	14	3	27
No. Pos/Neu/Neg	3/2/10	5/1/3	35/0/3	51/2/3	3/0/0	5/0/9	3/0/0	25/2/0

Individual PCAOB Rules

PCAOB Auditing Standard No. 1

No. of Letters	0	0	0	0	5	0	0	0
No. Pos/Neu/Neg	-	-	-	-	4/1/0	-	-	-

[SOX Section 101: Establishment; Administrative Provisions]

[SOX Section 103: Auditing, Quality Control, and Independence Standards and Rules]

[SOX Section 107: Commission Oversight of the Board]

PCAOB Auditing Standard No. 2

No. of Letters	16	3	0	0	12	0	1	0
No. Pos/Neu/Neg	1/4/11	1/1/1	-	-	6/3/3	-	0/1/0	-

[SOX Section 103: Auditing, Quality Control, and Independence Standards and Rules]

[SOX Section 404: Management Assessment of Internal Controls]

Total Letters Commenting on Rules on Corporate Responsibility [SOX Title III]

No. of Letters	191	86	48	109	49	244	28	33
No. Pos/Neu/Neg	18/17/156	14/9/63	39/6/3	93/11/5	19/6/24	17/23/204	19/3/6	5/2/26
Pct. Pos/Neu/Neg	9/9/82	16/10/73	81/13/6	85/10/5	39/12/49	7/9/84	68/11/21	15/6/79

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**Commenter: Corporation Non-Investor Group Investor Group Individual Accountant Lawyer Academic Other**

Break-down of Letters Submitted on Corporate Responsibility Rules:

Commenter:	Corporation	Non-Investor Group	Investor Group	Individual	Accountant	Lawyer	Academic	Other
Standards Relating To Listed Company Audit Committees								
No. of Letters	81	9	6	14	27	1	15	
No. Pos/Neu/Neg	4/5/72	8/1/0	4/1/1	5/4/5	1/3/23	1/0/0	2/1/12	
[SOX Section 301: Public Company Audit Committees]								
Certification of Disclosure in Companies' Quarterly and Annual Reports								
No. of Letters	19	2	52	5	23	1	3	
No. Pos/Neu/Neg	4/1/14	1/0/1	49/2/1	1/1/3	3/2/18	1/0/0	0/0/3	
[SOX Section 302: Corporate Responsibility for Financial Reports]								
Certification of Disclosure in Certain Exchange Act Reports								
No. of Letters	1	0	0	1	4	1	0	
No. Pos/Neu/Neg	0/0/1	-	-	1/0/0	1/1/2	1/0/0	-	
[SOX Section 302: Corporate Responsibility for Financial Reports]								
[SOX Section 906: Corporate Responsibility for Financial Reports]								
Improper Influence on Conduct of Audits								
No. of Letters	6	2	14	10	9	0	1	
No. Pos/Neu/Neg	0/1/5	2/0/0	14/0/0	7/0/3	0/1/8	-	0/0/1	
[SOX Section 303: Improper Influence on Conduct of Audits]								
Retention of Records Relevant to Audits and Reviews								
No. of Letters	3	1	3	16	1	0	3	
No. Pos/Neu/Neg	2/1/0	0/0/1	2/1/0	3/1/12	0/0/1	-	0/1/2	
[SOX Section 802: Criminal Penalties for Altering Documents]								
Insider Trades During Pension Fund Blackout Periods								
No. of Letters	3	2	1	1	7	0	0	
No. Pos/Neu/Neg	1/1/1	1/1/0	1/0/0	1/0/0	0/4/3	-	-	
[SOX Section 306: Insider Trades During Pension Fund Blackout Periods]								
Implementation of Standards of Professional Conduct for Attorneys: Up-the-Ladder Provision								
No. of Letters	26	4	22	1	116	19	6	

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<b>Commenter:</b>	<b>Corporation</b>	<b>Non-Investor Group</b>	<b>Investor Group</b>	<b>Individual</b>	<b>Accountant</b>	<b>Lawyer</b>	<b>Academic</b>	<b>Other</b>
No. Pos/Neu/Neg [SOX Section 307: Rules of Professional Responsibility for Attorneys]	2/2/22 2/0/8	2/1/1	2/1/1	13/7/2	1/0/0	10/8/98	12/3/4	0/0/6
Implementation of Standards of Professional Conduct for Attorneys: Noisy-Withdrawal								
No. of Letters	23	5	2	2	0	46	4	2
No. Pos/Neu/Neg [SOX Section 307: Rules of Professional Responsibility for Attorneys]	2/2/19	0/0/5	1/0/1	2/0/0	-	2/1/43	3/0/1	1/0/1
Letters Commenting on NYSE And NASDAQ Rules (Not Part of SOX Itself)								
NYSE and NASD Rulemaking: New Standards and Changes in Corporate Governance and Practices of Listed Companies								
No. of Letters	25	17	11	5	1	8	2	3
No. Pos/Neu/Neg	3/3/19	1/8/8	11/0/0	4/0/1	0/0/1	0/2/6	1/0/1	2/0/1
NYSE and NASD Rulemaking: Shareholder Approval of Equity Compensation Plans and the Voting of Proxies								
No. of Letters	4	4	15	4	0	3	0	0
No. Pos/Neu/Neg	0/1/3	2/0/2	12/3/0	4/0/0	-	0/1/2	-	-
<b>Total Letters Commenting on Rules on Auditor Independence [SOX Title II]</b>								
Strengthening the Commission's Requirements Regarding Auditor Independence								
No. of Letters	59	16	12	18	129	14	8	7
No. Pos/Neu/Neg	9/4/46	1/1/14	11/0/1	7/2/9	11/4/114	4/1/9	5/2/1	1/2/4
Pct. Pos/Neu/Neg [SOX: Section 201-207: Auditor Independence]	15/7/78	6/6/88	92/0/8	39/11/50	9/3/88	29/7/64	63/25/13	14/29/57

Table II:

### **Propensity-Score Matching Diagnostics**

This table presents propensity-score matching diagnostics. Means of the matching variables are compared across lobbyists and non-lobbyists before and after matching. Firm market capitalization is expressed in M \$ and calculated for the end of week 6 of 2002 (Friday, February 8th). Book-to-market equity is calculated using book equity for the fiscal quarter ending in the fourth quarter of 2001 and market equity for the end of week 6 of 2002; this variable is winsorized at the top 5 and bottom 5 percentiles.

**Panel A. Lobbied against Enhanced Financial Disclosure and PCAOB**

Variable	Sample	Mean		t-test	
		Lobbyers	Non-Lobbyers	t	$p >  t $
Log of market capitalization (\$ M)	Unmatched	7.81	4.87	20.39	0.00
	Matched	7.81	7.75	0.28	0.78
Log of market capitalization (\$ M) squared	Unmatched	66.01	27.62	25.01	0.00
	Matched	66.01	65.00	0.29	0.77
Book-to-market equity (winsorized)	Unmatched	1.03	1.11	-0.79	0.43
	Matched	1.03	1.05	-0.14	0.89

**Panel B. Lobbied against Corporate Responsibility**

Variable	Sample	Mean		t-test	
		Lobbyers	Non-Lobbyers	t	$p >  t $
Log of market capitalization (\$ M)	Unmatched	7.61	4.90	13.30	0.00
	Matched	7.61	7.16	1.25	0.21
Log of market capitalization (\$ M) squared	Unmatched	64.24	27.95	16.75	0.00
	Matched	64.25	57.48	1.28	0.20
Book-to-market equity (winsorized)	Unmatched	2.11	1.09	7.05	0.00
	Matched	2.11	2.58	-1.28	0.20

**Panel C. Lobbied against Auditor Independence**

Variable	Sample	Mean		t-test	
		Lobbyers	Non-Lobbyers	t	$p >  t $
Log of market capitalization (\$ M)	Unmatched	8.62	4.86	10.40	0.00
	Matched	8.62	7.89	1.19	0.24
Log of market capitalization (\$ M) squared	Unmatched	79.82	27.66	13.44	0.00
	Matched	79.82	67.77	1.24	0.22
Book-to-market equity (winsorized)	Unmatched	1.19	0.93	1.25	0.21
	Matched	1.19	1.55	-0.72	0.47

**Panel D. Lobbied against Any Rule**

Variable	Sample	Mean		t-test	
		Lobbyers	Non-Lobbyers	t	$p >  t $
Log of market capitalization (\$ M)	Unmatched	7.73	4.87	23.15	0.00
	Matched	7.73	7.67	0.30	0.76
Log of market capitalization (\$ M) squared	Unmatched	64.72	27.69	27.96	0.00
	Matched	64.72	64.01	0.24	0.81
Book-to-market equity (winsorized)	Unmatched	1.21	1.09	1.34	0.18
	Matched	1.21	1.27	-0.39	0.70

Table III:

### Characteristics of Publicly Traded Firms that Did and Did Not Lobby the SEC

This table presents firm characteristics for companies that did and did not lobby against the proposed SOX-related SEC rule releases. Panel A examines the characteristics of firms that lobbied against the rules on Enhanced Financial Disclosure and the PCAOB. Panel B examines the characteristics of firms that lobbied against the Corporate Responsibility rules. Panel C examines the characteristics of firms that lobbied against the Auditor Independence rules. Panel D examines the characteristics of the non-lobbying firms in our sample. We present the number of observations, the 10th percentile, the median, the 90th percentile, the mean, and the standard deviation. Firm market capitalization is expressed in M \$ and calculated for the end of week 6 of 2002 (Friday, February 8th). Total assets (COMPUSTAT item 6) and sales (COMPUSTAT item 12) are expressed in M \$. ROA is return on assets calculated as the ratio between the cash flow from assets in place (Compustat item 308-item 125+item 46) and assets (Compustat item 6); this variable is winsorized at the top 5 and bottom 5 percentiles. Long-term earning growth forecasts are the mean analyst long-term growth forecast (from Zacks History Files) during 2001; this variable is winsorized at the top 5 and bottom 5 percentiles. Book-to-market equity is calculated using book equity for the fiscal quarter ending in the fourth quarter of 2001 and market equity for the end of week 6 of 2002; this variable is winsorized at the top 5 and bottom 5 percentiles. Years since inclusion in CRSP is the number of years since the firm appears in the CRSP files, i.e. the number of years since IPO or since CRSP started covering the firms' exchange (NYSE, AMEX and NASDAQ). Governance index is constructed by Gompers, Ishii, and Metrick [2003] by counting the number of governance provisions a firm has. More governance provisions (higher governance index) indicate worse governance. Percent of shares owned by top 5 executives is from Execucomp and it is calculated as the ratio between the sum of the aggregate number of shares held by the top 5 executives (excluding stock options) and the number of outstanding shares. All Compustat variables are for the fiscal year with fiscal year end date in 2001. \*\*\*, \*\* indicate significance at the 1%, 5% level, respectively, for tests of difference of mean between lobbyists and non-lobbyers.

**Panel A. Lobbied against Enhanced Financial Disclosure and PCAOB**

	N	10th	Median	90th	Mean	Std. dev.
Market capitalization (\$M)	196	177	2,703	42,036	16,785***	40,098
Assets (\$M)	191	583	6,945	141,158	54,629***	138,293
Sales (\$M)	188	139	2,664	43,727	14,054***	26,123
ROA, winsorized	153	0.00	0.05	0.17	0.07***	0.08
Long-term earnings growth forecast (%) (winsorized)	180	7.78	13.24	22.72	14.97***	5.860
Book-to-market equity (winsorized)	188	0.18	0.55	2.00	1.03	1.51
Years since inclusion in CRSP	196	4.00	19.00	56.00	24.97***	20.46
Governance index (high=low governance)	112	6.00	10.00	13.00	9.80***	2.76
Percent of shares owned by top 5 executives	123	0.01	0.14	3.47	1.36**	3.38

**Panel B. Lobbied against Corporate Responsibility**

	N	10th	Median	90th	Mean	Std. dev.
Market capitalization (\$M)	98	58	2,662	56,766	21968***	57,509
Assets (\$M)	95	1,239	22,754	256,898	81,136***	163,335
Sales (\$M)	90	489	8,054	62,818	24,452***	37,609
ROA, winsorized	79	-0.01	0.06	0.24	0.07***	0.08
Long-term earnings growth forecast (%) (winsorized)	79	8.38	12.70	22.24	14.41***	5.49
Book-to-market equity (winsorized)	92	0.16	0.72	5.95	2.11***	2.42
Years since inclusion in CRSP	98	2.00	15.50	73.00	22.95***	24.38
Governance index (high=low governance)	33	8.00	11.00	13.00	10.15***	2.27
Percent of shares owned by top 5 executives	40	0.00	0.03	0.91	1.08	4.00

**Panel C. Lobbied against Auditor Independence**

	N	10th	Median	90th	Mean	Std. dev.
Market capitalization (\$M)	31	156	6,902	82,820	38946***	82,715
Assets (\$M)	30	1,170	20,809	315,769	87,560***	163,991
Sales (\$M)	29	1,358	10,524	61,257	26,638***	38,713
ROA, winsorized	22	0.02	0.06	0.24	0.09***	0.09
Long-term earnings growth forecast (%) (winsorized)	27	8.30	14.32	21.29	15.58***	7.68
Book-to-market equity (winsorized)	31	0.14	0.59	3.90	1.19	1.74
Years since inclusion in CRSP	31	2.00	30.00	58.00	26.52***	24.14
Governance index (high=low governance)	21	6.00	10.00	13.00	9.86**	2.63
Percent of shares owned by top 5 executives	22	0.00	0.04	1.03	1.93	8.23

**Panel D. Non-lobbyers**

	N	10th	Median	90th	Mean	Std. dev.
Market capitalization (\$M)	6,975	10	119	1,717	1,099	6,172
Assets (\$M)	6,145	19	256	4,014	3,334	24,161
Sales (\$M)	5,830	10	135	2,397	1,367	5,714
ROA, winsorized	5,363	-0.23	0.03	0.17	0.00	0.16
Long-term earnings growth forecast (%) (winsorized)	3,767	10.00	20.27	40.00	22.85	10.79
Book-to-market equity (winsorized)	6,100	0.15	0.65	2.46	1.10	1.37
Years since inclusion in CRSP	6,975	2.00	8.00	30.00	11.98	12.28
Governance index (high=low governance)	1,221	5.00	9.00	12.00	8.85	2.70
Percent of shares owned by top 5 executives	1,370	0.00	0.32	8.70	2.94	7.84

Table IV:

**Industry Classification of Firms that Did and Did not Lobby the SEC**

This table presents the industry classification for companies that did and did not lobby against the proposed SOX-related SEC rule releases. We use the updated Fama-French industry classification that reclassifies SIC codes into different industry groupings. In Fama-French 49-industry classification, the groups are formed in such a way that each industry is more likely to share common risk characteristics than in other classifications. 26 firms have SIC codes that are not included in the Fama-French 49-industry classification. We allocate them across the 49 industries, but 19 of them are classified in the Fama-French category “Other” because they are not included in the SIC code manual or because they do not fit into one of the other 48 Fama-French industries.

<b>Industry</b>	Lobbied Against Enhanced Financial Disclosure and PCAOB	Lobbied Against Corporate Responsibility	Lobbied Against Auditor Independence	Non-Lobbyers
Agriculture	0.00	0.00	0.00	0.19
Food Products	2.04	0.00	0.00	1.08
Candy and Soda	0.00	0.00	0.00	0.32
Beer and Liquor	1.53***	1.02	0.00	0.34
Tobacco Products	0.00	0.00	0.00	0.11
Recreation	0.51	2.04	0.00	0.72
Entertainment	0.00	0.00	0.00	1.00
Printing and Publishing	0.51	1.02	0.00	0.82
Consumer Goods	2.04	5.10***	0.00	1.05
Apparel	0.51	0.00	0.00	0.75
Healthcare	0.00*	0.00	3.23	1.51
Medical Equipment	0.51*	0.00	3.23	2.57
Pharmaceutical Products	3.57	4.08	9.68	4.54
Chemicals	1.53	2.04	3.23	1.30
Rubber and Plastic Products	0.00	0.00	0.00	0.69
Textiles	0.00	0.00	0.00	0.29
Construction Materials	1.02	1.02	0.00	1.26
Construction	1.02	1.02	0.00	0.97
Steel Works Etc	1.02	0.00	0.00	1.15
Fabricated Products	0.00	0.00	0.00	0.19
Machinery	4.59**	2.04	0.00	2.19
Electrical Equipment	2.04	5.10*	6.45	2.31
Automobiles and Trucks	2.55**	4.08***	6.45***	0.99
Aircraft	0.51	0.00	0.00	0.27
Shipbuilding, Railroad Equipment	0.00	0.00	3.23***	0.14
Defense	0.51*	1.02***	0.00	0.09
Precious Metals	0.00	0.00	0.00	0.54
Non-Metallic and Industrial Metal Mining	0.00	0.00	0.00	0.43
Coal	0.51*	1.02***	0.00	0.10
Petroleum and Natural Gas	6.12***	8.16***	0.00	2.80
Utilities	6.63***	5.10**	6.45**	1.75
Communication	2.04	7.14*	0.00	3.87
Personal Services	0.00	0.00	0.00	0.97
Business Services	3.06*	1.02**	0.00	6.25
Computers	0.00**	1.02	3.23	2.11
Computer Software	3.06***	3.06**	6.45	8.66
Electronic Equipment	4.59	6.12	0.00	5.19
Measuring and Control Equipment	0.51	1.02	0.00	1.61
Business Supplies	0.51	1.02	0.00	0.92
Shipping Containers	1.02**	0.00	0.00	0.26
Transportation	0.51	5.10**	0.00	2.02
Wholesale	2.04	0.00*	9.68**	3.25
Retail	4.08	4.08	0.00	3.87
Restaurants, Hotels, Motels	0.00*	0.00	3.23	1.66
Banking	15.82**	9.18	12.90	10.32
Insurance	4.08	8.16***	16.13***	2.38
Real Estate	0.00	0.00	0.00	0.82
Trading	19.39***	9.18	6.45	12.87
Other	0.00	0.00	0.00	0.52

Table V:

### **Determinants of Lobbying by Corporate Insiders**

The table presents the results of the proposed SOX-related SEC rule releases. In Panel A, the dependent variable is an indicator taking the value of one if the firm lobbied against one or more of the rules on Enhanced Financial Disclosure and PCAOB, and zero otherwise. In Panel B, the dependent variable is an indicator taking the value of one if the firm lobbied against one or more of the rules on Corporate Responsibility, and zero otherwise. In Panel C, the dependent variable is an indicator taking the value of one if the firm lobbied against one or more of the rules on Auditors Independence, and zero otherwise. Size is the natural log of assets (Compustat item 6). ROA is return on assets calculated as the ratio between the cash flow from assets in place (Compustat item 308 - item 125 + item 46) and assets (Compustat item 6); this variable is winsorized at the top 5 and bottom 5 percentiles. Long-term earning growth forecasts are the mean analyst long-term growth forecast (from Zacks History Files) during 2001; this variable is winsorized at the top 5 and bottom 5 percentiles. Governance index is constructed by Gompers, Ishii, and Metrick [2003] by counting the number of governance provisions a firm has. More governance provisions (higher governance index) indicate worse governance. All Compustat variables are for the fiscal year with fiscal year end date in 2001. In some specifications, we include indicator variables for Fama-French 49 industry classification. All tests use White [1980] heteroscedasticity-consistent robust standard errors. \*\*\*, \*\*, \* represent statistical significance at the 1, 5, and 10 percent level, respectively.

**Panel A. Lobbied Against Enhanced Financial Disclosure and PCAOB**

	(1)	(2)	(3)	(4)	(5)
Size	0.2624*** (0.0199)	0.2848*** (0.0223)	0.2719*** (0.0180)	0.2517*** (0.0210)	0.2679*** (0.0236)
ROA	2.0624*** (0.4854)	1.8273*** (0.4985)		1.9536*** (0.4855)	1.7094*** (0.4951)
Long-term earnings growth forecast (%)	-0.0274*** (0.0064)	-0.0244*** (0.0070)		-0.0265*** (0.0067)	-0.0237*** (0.0073)
Governance index			0.0457** (0.0196)	0.0315 (0.0206)	0.0382* (0.0212)
49 Fama-French industry dummies	NO	YES	NO	NO	YES
Observations	6,520	5,728	6,520	6,520	5,728
Pseudo $R^2$	0.249	0.279	0.225	0.253	0.285

**Panel B. Lobbied Against Corporate Responsibility**

	(1)	(2)	(3)	(4)	(5)
Size	0.3442*** (0.0282)	0.3629*** (0.0298)	0.3593*** (0.0245)	0.3694*** (0.0278)	0.3908*** (0.0297)
ROA	2.7812*** (0.8358)	2.2489** (0.9413)		3.1224*** (0.8389)	2.5270*** (0.9483)
Long-term earnings growth forecast (%)	-0.0296*** (0.0098)	-0.0473*** (0.0110)		-0.0280*** (0.0099)	-0.0459*** (0.0107)
Governance index			0.0686** (0.0276)	0.0578** (0.0283)	0.0572* (0.0317)
49 Fama-French industry dummies	NO	YES	NO	NO	YES
Observations	6,520	5,217	6,520	6,520	5,217
Pseudo $R^2$	0.311	0.347	0.296	0.330	0.363

**Panel C. Lobbied Against Auditor Independence**

	(1)	(2)	(3)	(4)	(5)
Size	0.2819*** (0.0396)	0.3349*** (0.0511)	0.2647*** (0.0397)	0.2740*** (0.0425)	0.3341*** (0.0577)
ROA	3.3884*** (1.1815)	3.7794** (1.6680)		3.1538*** (1.1891)	3.7361** (1.6718)
Long-term earnings growth forecast (%)	-0.0086 (0.0146)	-0.0641*** (0.0171)		-0.0062 (0.0156)	-0.0666*** (0.0193)
Governance index			0.0445 (0.0315)	0.0395 (0.0337)	0.0349 (0.0429)
49 Fama-French industry dummies	NO	YES	NO	NO	YES
Observations	6,520	2,814	6,520	6,520	2,814
Pseudo $R^2$	0.256	0.367	0.245	0.267	0.384

Table VI:

### Scandal Involvement and Past Lobbying Behavior

Panel A presents the result of probit analysis of the likelihood of a company lobbied in the past. The dependent variable is an indicator taking the value of one if the firm lobbied against prior executive compensation reform (Lo [2003]) or proxy reform (Bradley et al [2005]). Size is the natural log of assets (Compustat item 6). ROA is return on assets calculated as the ratio between the cash flow from assets in place (Compustat item 308-item 125+item 46) and assets (Compustat item 6); this variable is winsorized at the top 5 and bottom 5 percentiles. Long-term earning growth forecasts are the mean analyst long-term growth forecast (from Zacks History Files) during 1990; this variable is winsorized at the top 5 and bottom 5 percentiles. Governance index is constructed by Gompers, Ishii, and Metrick [2003] by counting the number of governance provisions a firm has. More governance provisions (higher governance index) indicate worse governance. All Compustat variables are for the fiscal year with fiscal year end date in 1990. Panel B presents the results of probit analysis of the likelihood that a company was involved in scandal. The dependent variable is an indicator variable equal to one if the company was involved in a class action law suit that was not dismissed (Dyck, Morse and Zingales [2008]). Lobbied in the past is an indicator variable equal to one if the company lobbied against prior executive compensation reform (Lo [2003]) or proxy reform (Bradley et al [2005]), and zero otherwise. The explanatory variables are defined as in Panel A, except that they are for the year 1993 or the fiscal year ending in 1993. All tests use White [1980] heteroscedasticity-consistent robust standard errors. \*\*\*, \*\*, \* represent statistical significance at the 1, 5, and 10 percent level, respectively.

Panel A: Determinants of Lobbying Against Prior Reforms		
Size	0.3512*** (0.0289)	
ROA	1.9568*** (0.5975)	
Long-term earnings growth forecast (%)	-0.0201*** (0.0091)	
GINDEX	0.0536*** (0.0147)	
Observations	5,619	
Pseudo $R^2$	0.394	
Panel B: Determinants of Corporate Scandals		
Lobbied in the past	0.4503*** (0.1389)	0.2589* (0.1518)
Size	0.1355*** (0.0407)	0.1834*** (0.0443)
ROA	0.4936 (0.9330)	
Long-term earnings growth forecast (%)	0.0311*** (0.0087)	
GINDEX	-0.0324 (0.0201)	
Observations	1,435	1,435
Pseudo $R^2$	0.043	0.114

Table VII:

### Audit Fees and Changes in Audit Fees Before and After SOX for Firms that Did and Did not Lobby

The table presents the level of audit fees before SOX was passed and the changes in audit fees from before to after SOX. The firm's audit fees (expressed in \$M) are from Audit Analytics and are calculated in year 2001 and year 2004. In the first two columns, the dependent variable is the ratio between the difference in audit fees in 2004 and 2001, and firm market capitalization, with market capitalization expressed in \$B and calculated for the end of week 6 of 2002 (Friday, February 8th). Both variables are winsorized at the top 5 and bottom 5 percentiles. Lobbied Against Enhanced Financial Disclosure and PCAOB Rules is an indicator variable equal to one if the firm lobbied against the SEC rules related to SOX Titles I and IV ('Enhanced Disclosure'); Lobbied Against Corporate Responsibility Rules is an indicator variable equal to one if the firm lobbied against the SEC rules related to SOX Title III ('Corporate Responsibility'); Lobbied Against Auditors Independence Rules is an indicator variable equal to one if the firm lobbied against the SEC rules related to SOX Title II ('Auditor Independence'). In some specifications, the regression also includes indicator variables for 20 propensity score groups. The indicator variables are derived based on the probit for lobbying against any of these three types of rules and the 5th, 10th, . . . , 95th, 100th percentile of the predicted probability of lobbying. All tests use White [1980] heteroscedasticity-consistent robust standard errors. \*\*\*, \*\*, \* represent statistical significance at the 1, 5, and 10 percent level, respectively.

	(Audit fees 2004-Audit fees 2001)/ Initial market value		Audit fees 2001/ Initial market value	
	(1)	(2)	(3)	(4)
Lobbied against Enhanced Financial Disclosure and PCAOB	-1.136*** (0.148)	-0.057 (0.156)	-1.945*** (0.247)	-0.006 (0.258)
Lobbied against Corporate Responsibility	-0.525 (0.403)	0.579 (0.437)	-0.926 (0.586)	0.889 (0.639)
Lobbied against Auditor Independence	-0.381 (0.679)	0.403 (0.656)	-0.083 (0.945)	1.052 (0.891)
Constant	2.290*** (0.050)	2.187*** (0.049)	3.196*** (0.064)	3.038*** (0.060)
Indicators for 20 propensity score groups	No	Yes	No	Yes
Observations	4,650	4,402	5,540	5,241
$R^2$	0.005	0.057	0.006	0.127

Table VIII:

**Portfolio Analysis: Excess Returns During the Period Leading up to Passage of the Sarbanes-Oxley Act of 2002 and the Period from Passage to the End of 2004**

The table presents the excess returns and abnormal (factor-adjusted) excess returns for firms that lobbied against SOX-related rules relative to non-lobbying firms. Panel A reports the results for firms that lobbied against Enhanced Financial Disclosure and PCAOB rules; Panel B presents the results for firms that lobbied against Corporate Responsibility rules; Panel C presents the results for firms that lobbied against Auditor Independence rules. Excess returns are calculated for each lobbying firm by subtracting the return on a portfolio of non-lobbying firms obtained by using a propensity-score matching method based on size, book-to-market, and industry. Excess returns are then averaged for each week across the set of lobbying firms. These average excess returns are then regressed either on a constant or on a constant and the three market, size, and book-to-market factors. This is done for the 24-week period from week 7 to 30 of 2002 leading up to passage of SOX only (Column 1) and then for the period starting with week 7 of 2002 and ending in the last week of 2004 (Columns 2 and 3).

**Panel A. Lobbied Against Enhanced Financial Disclosure and PCAOB**

	(1)	(2)	(3)
$\alpha_{Lead-Up}$	0.0029** (0.0011)	0.0029*** (0.0011)	0.0026** (0.0012)
$\alpha_{Post}$		-0.0001 (0.0003)	0.0002 (0.0002)
$\beta_{Market}$			-0.0637*** (0.0188)
$\beta_{SMB}$			-0.0376 (0.0304)
$\beta_{HML}$			-0.0563 (0.0414)
Observations (Weeks)	24	151	151
$R^2$	0.235	0.073	0.176

**Panel B. Lobbied against Corporate Responsibility**

	(1)	(2)	(3)
$\alpha_{Lead-Up}$	0.0016 (0.0014)	0.0016 (0.0014)	0.0026* (0.0014)
$\alpha_{Post}$		-0.0009 (0.0005)	-0.0007 (0.0005)
$\beta_{Market}$			0.0220 (0.0224)
$\beta_{SMB}$			-0.1105*** (0.0386)
$\beta_{HML}$			-0.1288** (0.0531)
Observations (Weeks)	24	151	151
$R^2$	0.058	0.033	0.165

**Panel C. Lobbied against Auditor Independence**

	(1)	(2)	(3)
$\alpha_{Lead-Up}$	0.0036 (0.0023)	0.0036 (0.0023)	0.0038 (0.0025)
$\alpha_{Post}$		-0.0008 (0.0007)	-0.0002 (0.0006)
$\beta_{Market}$			-0.0741** (0.0367)
$\beta_{SMB}$			-0.1598*** (0.0559)
$\beta_{HML}$			-0.1320 (0.1000)
Observations (Weeks)	24	151	151
$R^2$	0.096	0.038	0.146

Table IX:

**Firm-Level Analysis:  
Excess Returns During the Period Leading Up to Passage of the Sarbanes-Oxley Act  
of 2002 and the Period from Passage to the End of 2004**

This table reports results for the excess returns for lobbying firms relative to non-lobbying firms at the firm level. In the first column, the dependent variable is the sum of each firm's excess return minus the riskless rate during the lead-up period, while in the second column it is the sum of each firm's excess return minus the riskless rate during the post-SOX period. Lobbied Against Enhanced Financial Disclosure and PCAOB Rules is an indicator variable equal to one if the firm lobbied against the SEC rules related to SOX Titles I and IV ('Enhanced Disclosure'); Lobbied Against Corporate Responsibility Rules is an indicator variable equal to one if the firm lobbied against the SEC rules related to SOX Title III ('Corporate Responsibility'); Lobbied Against Auditors Independence Rules is an indicator variable equal to one if the firm lobbied against the SEC rules related to SOX Title II ('Auditor Independence'). The regressions also include indicator variables for 20 propensity score groups. The indicator variables are derived based on the probit for lobbying against any of these three types of rules and the 5th, 10th, . . . , 95th, 100th percentile of the predicted probability of lobbying. All tests use White [1980] heteroscedasticity-consistent robust standard errors. \*\*\*, \*\*, \* represent statistical significance at the 1,5, and 10 percent level, respectively.

	Cumulative weekly excess return over the riskless rate during the lead-up period	Cumulative weekly excess return over the riskless rate during the post-passage period
Lobbied against Enhanced Financial Disclosure and PCAOB	0.0797*** (0.0235)	-0.0056 (0.0487)
Lobbied against Corporate Responsibility	-0.0001 (0.0272)	-0.0554 (0.0397)
Lobbied against Auditor Independence	0.0208 (0.0418)	-0.0487 (0.0639)
Constant	-0.1638*** (0.0055)	0.7573*** (0.0104)
Indicators for 20 propensity score groups	Yes	Yes
Observations	6,827	6,511
$R^2$	0.010	0.024

Table X:

### Returns Around Pre-Passage Probability Changing Events

The table presents excess returns at the firm level for lobbying and non-lobbying firms over subperiods of the 24 week pre-passage period during which events occurred that were likely to have increased the probability of SOX passage by Congress and/or the severity of SOX. Our four sub-periods are 7/24-7/25/2002, during which the Senate and House agreed on the final bill and voted to pass SOX; 6/26-7/1/2002, during which it was revealed that Worldcom had misstated earnings by \$3.8B and trading in its stock was halted; 6/20/2002, when the SEC proposed the creation of an accounting oversight board, and 6/18/2002, when Sarbanes's bill, which included an oversight board, was passed in the Senate. Returns for the sub-period are constructed from daily CRSP returns. The dependent variable is the sum of each firm's return minus the riskless rate during the sub-period in question (0.01 corresponds to a 1 percent excess return). Lobbied Against Enhanced Financial Disclosure and PCAOB Rules is an indicator variable equal to one if the firm lobbied against the SEC rules related to SOX Titles I and IV ('Enhanced Disclosure'); Lobbied Against Corporate Responsibility Rules is an indicator variable equal to one if the firm lobbied against the SEC rules related to SOX Title III ('Corporate Responsibility'); Lobbied Against Auditors Independence Rules is an indicator variable equal to one if the firm lobbied against the SEC rules related to SOX Title II ('Auditor Independence'). The regressions also include indicator variables for 20 propensity score groups. The indicator variables are derived based on the probit for lobbying against any of the three types of rules and the 5th, 10th, . . . , 95th, 100th percentile of the predicted probability of lobbying. All tests use White [1980] heteroscedasticity-consistent robust standard errors. \*\*\*, \*\*, \* represent statistical significance at the 1,5, and 10 percent level, respectively.

	7/24-7/25	6-26-7/1	6/20	6/18
Lobbied against Enhanced Financial Disclosure and PCAOB	0.0094* (0.0053)	0.0069*** (0.0034)	0.0032*** (0.0014)	0.0074*** (0.0019)
Lobbied against Corporate Responsibility	-0.0047 (0.0080)	0.0062 (0.0051)	-0.0023 (0.0019)	-0.0021 (0.0026)
Lobbied against Auditor Independence	0.0156 (0.0094)	-0.0111 (0.072)	-0.0021 (0.0028)	0.0013 (0.0031)
Constant	0.0140*** (0.0011)	-0.0062 (0.0012)	-0.0008 (0.0006)	-0.0043*** (0.0006)
Indicators for 20 propensity score groups	Yes	Yes	Yes	Yes
Observations	6,537	6,575	6,605	6,599
$R^2$	0.021	0.005	0.001	0.007

Table XI:

**Cost-Benefit Analysis**

This table reports estimates of the cost of complying with SOX Section 404. Panel A reports estimates of compliance costs per firm for firms of different sizes classified on the basis of sales revenues. The estimates are from the *FEI Survey on SOX Section 404 Implementation/March 2006*. Panel B calculates the total estimated compliance costs for the full set of NYSE, AMEX and NASDAQ firms, for the subset of these firms that did not lobby, and for each of the three sets of lobbyists. Based on year 2001 sales, we assign each firm in the sample the average compliance costs associated with FEI sales category. Panel B also shows the total equity market value for each of these sets of firms and the ratio of the group's total compliance costs to the group's total equity market value. Panel C calculates the present value of the benefits of SOX based on a 7% abnormal excess return for lobbying firms and the present value of costs under different discount rates.

**Panel A. Costs of Complying with SOX Section 404, by Sales Revenue**

Annual sales revenue	Internal costs (per firm)	External costs (per firm)	Auditor attestation fees (per firm)	Total compliance cost (per firm)
Less than \$25M	\$158,200	\$195,688	\$260,521	\$614,409
\$25M to \$99M	\$136,000	\$636,867	\$404,615	\$1,177,482
\$100M to \$499M	\$228,755	\$493,155	\$439,121	\$1,161,031
\$500M to \$999M	\$345,700	\$844,462	\$750,549	\$1,940,711
\$1B to \$4.9B	\$752,640	\$1,057,574	\$824,866	\$2,635,081
\$5B to \$24.9B	\$2,461,085	\$2,736,289	\$2,698,801	\$7,896,175
More than \$25B	\$4,331,960	\$2,865,251	\$4,815,864	\$12,013,075

**Panel B. Aggregate Compliance Cost Estimates for Various Groups of Firms**

Group of firms	Number of firms	Sum of total compliance cost for firm group (\$M)	Sum of market value for firm group (\$M)	Compliance costs as a percentage of market value
All firms in CRSP	7,356	13,852	13,537,172	0.102%
Firms that did not lobby	6,975	11,896	7,665,292	0.155%
Firms that lobbied against Enhanced Financial Disclosure and PCAOB	196	1,013	3,289,819	0.031%
Firms that lobbied against Corporate Responsibility	98	675	2,152,818	0.031%
Firms that lobbied against Auditor Independence	31	241	1,207,347	0.020%

**Panel C. Cost and Benefit Analysis**

	PV of gross benefit (\$M) (based on 7%)	PV of compliance costs (\$M)			Net benefit (\$M)		
		At r=5%	At r=10%	At r=15%	At r=5%	At r=10%	At r=15%
All firms in CRSP	230,287	277,040	138,520	92,347	-46,753	91,767	137,940
Firms that lobbied against Enhanced Financial Disclosure and PCAOB	230,287	20,264	10,132	6,755	210,023	220,155	223,530

## Appendix A. Description of the Rules

The following table describes the main features of each rule adopted or proposed by the SEC, the date of proposing release, the date of adopting release, if available, and whether the rule was adopted with or without amendments.

Proposing Release Date	Adopting Release Date	Description	Adopted/Pending/Not Adopted
<b>SOX Title II: Auditor Independence</b>			
12/2/2002 (No. 33-8154)	1/28/2003 (No. 33-8183) Amended 3/26/2003 (No. 33-8183a)	Strengthening the Commission's Requirements Regarding Auditor Independence Changes the requirements regarding auditor independence to enhance the independence of accountants that audit and review financial statements and prepare attestation reports filed with the Commission. Includes regulation related to non-audit services. Prohibits partners on the audit engagement team from providing audit services to the issuer for more than five consecutive years. [SOX: Section 201-207: Auditor Independence]	Adopted (with amendment)
<b>SOX Title III: Corporate Responsibility</b>			
1/8/2003 (No. 34-47137)	4/9/2003 (No. 33-8220)	Standards Relating to Listed Company Audit Committees Requires national securities exchanges and national securities associations to prohibit the listing of any security of an issuer that is not in compliance with the audit committee requirements mandated by the Sarbanes-Oxley Act of 2002 (the independence of audit committee members, the audit committee's responsibility to select and oversee the issuer's independent accountant, procedures for handling complaints regarding the issuer's accounting practices, the authority of the audit committee to engage advisors; and funding for the independent auditor and any outside advisors engaged by the audit committee). [SOX Section 301: Public Company Audit Committees]	Adopted
6/17/2002 (No. 34-46079) Up-dated 8/2/2002 (No. 34-46300)	8/29/2002 (No. 33-8124)	Certification of Disclosure in Companies' Quarterly and Annual Reports Requires an issuer's principal executive and financial officers to each certify the financial and other information contained in the issuer's quarterly and annual reports. Also requires these officers to certify that they are responsible for establishing and maintaining issuer's internal controls. [SOX Section 302: Corporate Responsibility for Financial Reports]	Adopted
3/21/2003 (No. 33-8212)	6/5/2003 (included in No. 33-8238)	Certification of Disclosure in Certain Exchange Act Reports Extends requirements to provide the certifications required by Sections 302 and 906 of the Sarbanes-Oxley Act of 2002 to reports other than annual and quarterly reports. [SOX Section 302: Corporate Responsibility for Financial Reports] [SOX Section 906: Corporate Responsibility for Financial Reports]	Adopted
10/18/2002 (No. 34-46685)	5/20/2003 (No. 34-47890)	Improper Influence on Conduct Of Audits Implements the SOX prohibition on officers and directors of an issuer, and on persons acting under the direction of an officer or director, from taking any action to fraudulently influence, coerce, manipulate or mislead the auditor of the issuer's financial statements for the purpose of rendering the financial statements materially misleading.	Adopted

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Proposing Release Date	Adopting Release Date	Description	Adopted/Pending/Not Adopted
		[SOX Section 303: Improper Influence On Conduct Of Audits]	
11/21/2002 (No. 33-8151)	1/24/2003 (No. 33-8180)	Retention of Records Relevant to Audits and Reviews Requires accountants who audit or review an issuer's financial statements to retain certain records relevant to that audit or review for a period of seven years from the end of the fiscal year in which an audit or review was concluded. [SOX Section 802: Criminal Penalties for Altering Documents]	Adopted
11/6/2002 (No. 34-46778)	1/22/2003 (No. 34-47225)	Insider Trades During Pension Fund Blackout Periods Prohibits any director or executive officer of an issuer of any equity security from, directly or indirectly, purchasing, selling or otherwise acquiring or transferring any equity security of the issuer during a pension plan blackout period that temporarily prevents plan participants or beneficiaries from engaging in equity securities transactions through their plan accounts, if the director or executive officer acquired the equity security in connection with his or her service or employment as a director or executive officer. [SOX Section 306: Insider Trades During Pension Fund Blackout]	Adopted
11/21/2002 (No. 33-8150)	1/29/2003 (No. 33-8185)	Implementation of Standards of Professional Conduct for Attorneys: Up-the-Ladder Provision Establishes an up-the-ladder reporting system for attorneys who appear and practice before the Commission on behalf of public companies. Requires attorneys to report evidence of a material violation of the securities laws, a material breach of a fiduciary duty, or a similar material violation by a company or any of its agents to its chief legal counsel (CLO) or to both its CLO and chief executive officer (CEO); and if the CLO or CEO does not respond appropriately to the evidence, report this evidence to the audit committee, other independent committee, or the board of directors. [SOX Section 307: Rules of Professional Responsibility for Attorneys]	Adopted
1/29/2003 (No. 33-8186)	Pending	Implementation of Standards of Professional Conduct for Attorneys: Noisy-Withdrawal Requires that, in certain circumstances, an attorney withdraw from representing an issuer and report that withdrawal to the Commission. [SOX Section 307: Rules of Professional Responsibility for Attorneys]	Pending
Related NYSE And NASDAQ Rules (Not Part of SOX Itself)			
8/16/2002 (Original Proposal)	11/4/2003 (No. 34-48745)	NYSE and NASD Rulemaking: New Standards and Changes in Corporate Governance and Practices of Listed Companies NYSE requires for each listed company: (1) that the board of directors consists of a majority of independent directors; (2) that the non-management directors should meet at regularly scheduled executive sessions without management; (3) to have a nominating/corporate governance committee composed entirely of independent directors; (4) to have a compensation committee composed entirely of independent directors; (5) to have a minimum three-person audit committee composed entirely of directors that meet the independence standards; (6) that the audit committee has a written audit committee charter; (7) to have an internal audit function; (8) to adopt and disclose corporate governance guidelines; (9) to adopt and disclose a code of business conduct and ethics for directors, officers and employees; (10) to have the CEO certify to the NYSE each year that he or she is not aware of any violation by the company of the NYSE's corporate governance listing standards. Similar rules for NASD.	Adopted (with various modifications)

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Proposing Release Date	Adopting Release Date	Description	Adopted/Pending/Not Adopted
10/8/2002 (No. 34-46620) Corrected	6/30/2003 (No. 34-48108)	NYSE and NASD Rulemaking: Shareholder Approval of Equity Compensation Plans and the Voting of Proxies Requires shareholder approval of all equity-compensation plans and material revisions to such plans, subject to limited exemptions for issuers listed on NASD and NYSE	Adopted
10/21/2002 (No. 34-46620A)			
<b>SOX Title IV And Title I: Enhanced Disclosure</b>			
5/10/2002 (No. 33-8098)	None	<u>Disclosure in Management's Discussion and Analysis of Critical Accounting Policies</u> Disclosure requirements that regard application of companies' critical accounting policies in two areas: accounting estimates a company makes in applying its accounting policies and the initial adoption by a company of an accounting policy that has a material impact on its financial presentation. [SOX Section 401: Disclosure in Periodic Reports]	Not Adopted (proposed rule replaced by the rule below)
11/4/2002 (No. 33-8144)	1/27/2003 (No. 33-8182)	<u>Disclosure in Management's Discussion and Analysis of Off-Balance Sheet Arrangements Contractual Obligations and Contingent Liabilities and Commitments</u> Requires disclosure of off-balance sheet transactions, arrangements, obligations, that have, or may have, a material effect on financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources. [SOX Section 401: Disclosure in Periodic Reports]	Adopted
11/5/2002 (No. 33-8145)	1/22/2003 (No. 33-8176 and No. 33-8216)	<u>Conditions For Use Of Non-GAAP Financial Measures</u> Requires public companies that disclose or release these non-GAAP financial measures to include, in that disclosure or release, a presentation of the most comparable GAAP financial measure and a reconciliation of the disclosed non-GAAP financial measure to the most comparable GAAP financial measure. [SOX Section 401: Disclosure in Periodic Reports]	Adopted
12/20/2002 (No. 33-8170)	5/7/2003 (No. 33-8230)	Mandated Electronic Filing and Website Posting for Forms 3, 4 and 5 Mandates the electronic filing and website posting by issuers with corporate websites, of beneficial ownership reports filed by officers, directors and principal security holders. [SOX Section 403: Disclosures of Transactions Involving Management and Principal Stockholders]	Adopted
10/22/2002 (No. 33-8138)	6/5/2003 (No. 33-8238)	<u>Disclosure Required By Section 404 Of Sarbanes-Oxley On Internal Controls</u> Requires issuers to include in their annual reports a report of management on the company's internal control over financial reporting including: a statement of management's responsibility for establishing and maintaining adequate internal control; management's assessment of the effectiveness of the company's internal control; a statement identifying the framework used to evaluate the effectiveness of the internal controls; a statement that the registered public accounting firm that audited the company's financial statements has issued an attestation report on management's assessment of the company's internal control over financial reporting.	Adopted

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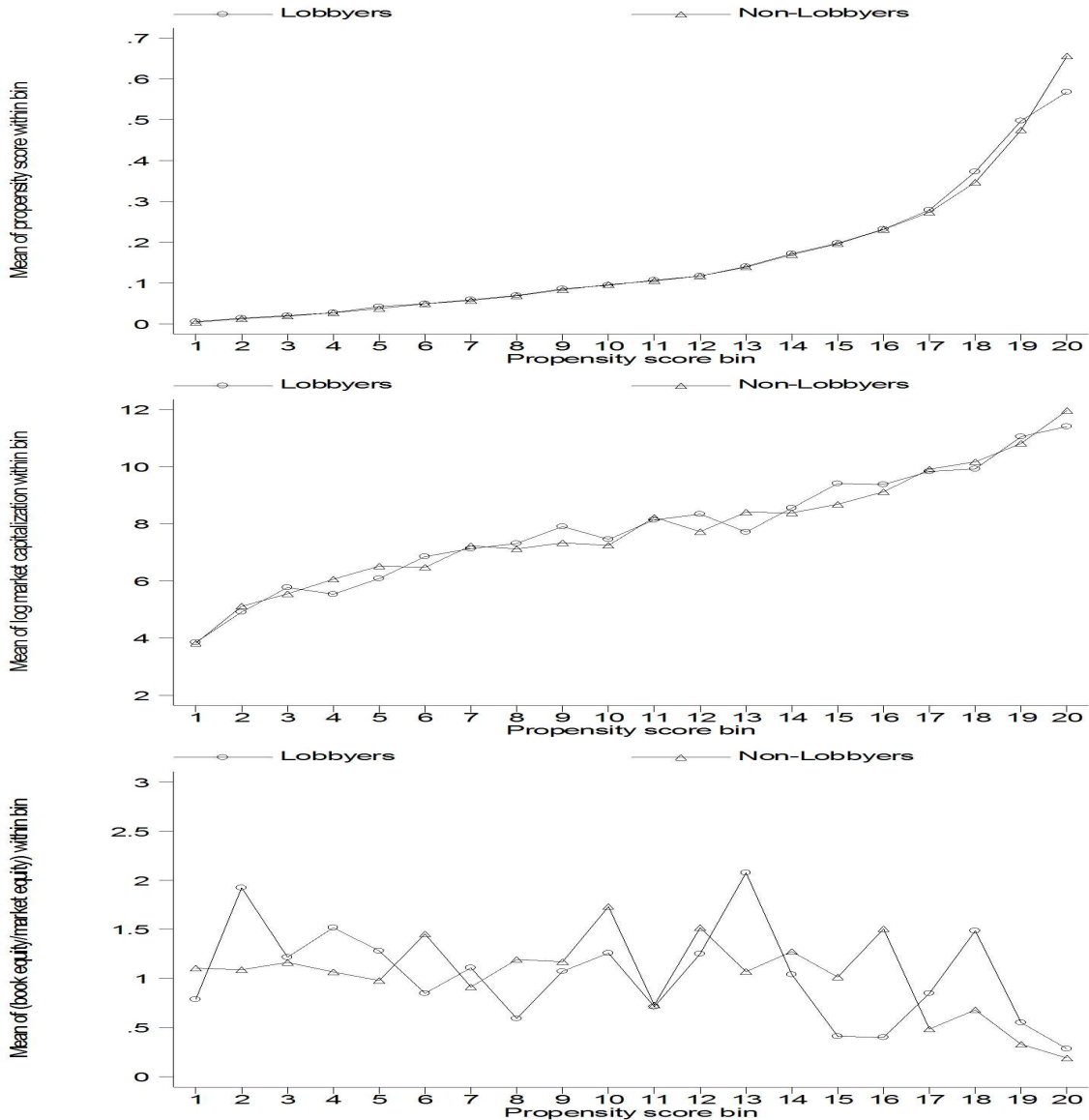
Proposing Release Date	Adopting Release Date	Description	Adopted/Pending/Not Adopted
10/22/2002 (No. 33-8138)	1/22/2003 (No. 33-8177) Amended 3/26/2003 (No. 33-8177a)	[SOX Section 404: Management Assessment of Internal Controls]  Disclosure Required by Sections 406 and 407 of Sarbanes-Oxley on Audit Committee Financial Expert and Code of Ethics Requires a company to disclose whether its audit committee includes at least one member who is a financial expert; also requires disclosure of whether the company has adopted a code of ethics for its senior financial officers and if not, why it has not done so. [SOX Section 406: Code of Ethics for Senior Financial Officers] [SOX Section 407: Disclosure of Audit Committee Financial Expert]	Adopted (with amendment)
6/17/2002 (No. 33-8106)	3/16/2004 (No. 34-49424)	Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date Adds eight more events that need to be reported on Form 8-K under the Securities Exchange Act of 1934. Also, transfers two items from the periodic reports and expands disclosures under two existing Form 8-K items. [SOX Section 409: Real-Time Issuer Disclosures]	Adopted
4/12/2002 (No. 33-8090)	None	Form 8-K Disclosure of Certain Management Transactions Proposes that some public companies have to file current reports describing: directors' and executive officers' transactions in company equity securities; directors' and executive officers' arrangements for the purchase and sale of company equity securities; and loans of money to a director or executive officer made or guaranteed by the company or an affiliate of the company. [Earlier SEC rule likely replaced by the SOX rule above.]	Not Adopted (proposed rule likely replaced by SOX rule No. 33-8106 listed above)
Related SEC Rules (Not Part Of SOX Itself)			
8/8/2003 (No. 34-48301)	11/24/2003 (No. 33-8340)	Disclosure Regarding Nominating Committee Functions and Communications Between Security Holders and Boards of Directors Enhances disclosure requirements regarding the operation of board nominating committees and introduces a new disclosure requirement concerning the means, if any, by which security holders may communicate with members of the board of directors.	Adopted
Individual PCAOB Rules			
4/6/2004 (No. 34-49528)	5/14/2004 (No. 34-49707)	PCAOB Auditing Standard No. 1 Requires registered public accounting firms to refer to the standards of the PCAOB in their audit reports, rather than to U.S. generally accepted auditing standards, or "GAAS." [SOX Section 101: Establishment; Administrative Provisions] [SOX Section 103: Auditing, Quality Control, and Independence Standards and Rules] [SOX Section 107: Commission Oversight of the Board]	Adopted
4/8/2004 (No. 34-49544) Corrected 4/13/2004 (No. 34-49544A)	6/17/2004 (No. 34-49884)	PCAOB Auditing Standard No. 2 Consists of an auditing standard applicable to audits of internal control over financial reporting of issuers by registered public accounting firms and five appendices containing example reports and additional guidance.	Adopted

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Proposing Release Date	Adopting Release Date	Description	Adopted/Pending/Not Adopted
		[SOX Section 103: Auditing, Quality Control, and Independence Standards and Rules]	
		[SOX Section 404: Management Assessment of Internal Controls]	

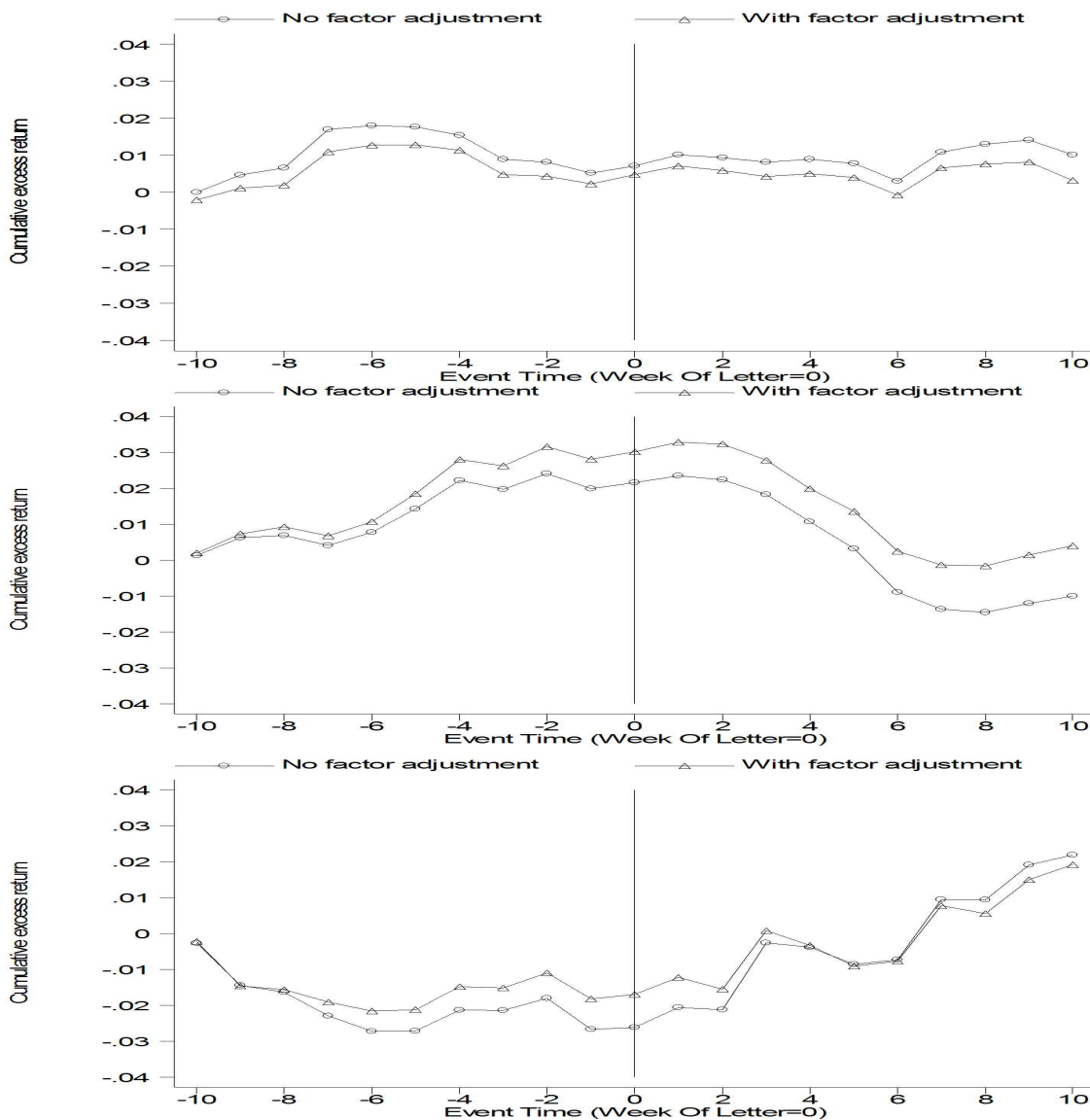
## Figure 1. Propensity-Score Matching

Figure 1 illustrates the results of our propensity-score matching. For readability the figure focuses on the propensity-score matching for lobbying against ‘Enhanced Disclosure’ rules. The top graph plots the average propensity score within each bin for lobbyists and non-lobbyists. The middle graph repeats this with averages of log market capitalization and the bottom graph focuses on averages of book-to-market ratios. The variable on the horizon axis in each figure is the propensity-score bin. Bins are defined based on the predicted probability of lobbying against the particular major rule category, calculated from a Probit regression of an indicator for lobbying on log market capitalization, the square of log market capitalization, book-to-market ratio, a dummy for missing book-to-market ratio, and indicators for the 49 Fama-French industries.



## Figure 2. Cumulative Excess Returns Around Date of Filing Lobbying Letter with Negative Opinion

The figures show the cumulative excess returns over and above their matched comparison groups for companies who lobby the SEC. The graphs illustrate excess returns around the date of SEC receipt of the lobbying letter. Results are shown separately for firms lobbying against one of the SOX enhanced disclosure rules (top), corporate responsibility rules (middle), or auditor independence rules (bottom), and are based exclusively on letters expressing negative opinions about the particular rule. In each graph, results are shown for two different definitions of excess returns. The lines labeled “No factor adjustment” are based on excess returns defined as (return on lobbying firm stock)-(return on a propensity score-matched comparison group of non-lobbying firms). The lines labeled “With factor adjustment” are based on excess returns defined as the residual from a regression (run on weekly data from week 31 of 2002 to the end of 2004) of (return on lobbying firm stock)-(return on propensity score-matched comparison group) on a constant, the excess return on the market, and Fama and French’s size and book-to-market factors SMB and HML. For each approach, excess returns are averaged across lobbying firms for each week in event time, and then summed over time, starting 10 weeks before the week of the letter and ending 10 weeks after the week of the letter. Results are based only on letters filed at least 10 weeks after the passage of SOX so that no point in the figures overlap with the period leading up to passage of SOX.



**Figure 3. Cumulative Excess Returns During the Years 2002-2004 for Publicly-Traded Firms that Lobby the SEC**

The figures show the cumulative excess returns over and above their matched comparison groups for companies who lobby the SEC. Excess returns are shown starting in week 7 of 2002 and up to the end of 2004. Results are shown separately for firms lobbying against one of the SOX enhanced disclosure rules (top), corporate responsibility rules (middle), or auditor independence rules (bottom), and are based exclusively on letters expressing negative opinions about the particular rule. Two lines are shown. The unadjusted cumulative excess return (labeled “No factor adjustment”) is calculated by averaging the excess returns over the comparison group across lobbying firms in each week, and then summing these excess returns over time, starting in week 7 of year 2002. The factor-adjusted cumulative excess return (labeled “With factor adjustment”) is calculated by first regressing the average weekly excess return over the comparison group on the excess return on the market and the Fama-French size and book-to-market factors. The regression is run using weekly data from week 7 of 2002 until the end of 2004, and the alpha plus the residuals are averaged each week and then summed over time. The leftmost vertical line indicates the beginning of serious negotiations about SOX in Congress while the rightmost vertical line indicates the week SOX was passed in Congress.

