# The Effect of SOX Section 404: Costs, Earnings Quality and Stock Prices

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## Abstract

This paper exploits a natural quasi-experiment to isolate the effects that were uniquely due to Sarbanes-Oxley Act (SOX): US firms with a public float under \$75 million could delay Section 404 compliance, and foreign firms under \$700 million could delay the auditor's attestation requirement. As designed, Section 404 led to conservative reported earnings, but also imposed real costs. Net-in-net, SOX compliance reduced the market value of small firms.

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The Sarbanes-Oxley Act (SOX) was passed in 2002 after a string of high profile corporate scandals. The law's main goal was to improve the quality of financial reporting and to increase investor confidence. The Securities and Exchange Commission (SEC) was put in charge of enforcing the law. In 2003, SEC implemented Section 404 of SOX, which requires companies to put in place and periodically test procedures that monitor the internal systems ensuring accurate financial reports. Section 404 requires that managers report their findings in a special management's report, and an outside auditor attests to the management's assessment of the company controls.<sup>1</sup> According to the SEC, Section 404 procedures are intended to help companies detect fraudulent reporting early and deter financial fraud, directly improving the reliability of financial statements (SEC release 33-8238).

Recently, Section 404 and its practical application have been under intense attack from business groups and lawmakers. In 2005, the Duke University/CFO Magazine Business Outlook Survey put increased regulation as one of the top concerns of US corporations, third after competition and health care costs. The SEC's own Advisory Committee on Smaller Public Companies recommended renewed Section 404 exemptions for small firms because of the high costs of compliance (SEC (2006)). Testifying before the Small Business Committee of the U.S. House of Representatives, Michael J. Ryan Jr., executive director and senior vice president of the Center for Capital Markets Competitiveness at the U.S. Chamber of Commerce, concluded (based on evidence from the center survey) that Section 404 costs and regulatory burden are "far beyond what Congress intended and well in excess of the benefits to shareholders and management" (Manickavasagam (2007)).

Despite the above calls for small company exemption, the SEC only gave a five month extension to small companies' compliance, and Chairman Christopher Cox renewed the SEC commitment to enforcing SOX compliance for all US firms (Reilly and Scannell (2006)). In response to the SEC's

actions, the House Small Business Committee Chairwoman Nydia M. Velazquez (D-N.Y.) said that "while this delay will help ease undue burdens on small firms it is by no means the final stage of this fight" (Donar (2007)). On April 25, 2007, the Senate unanimously passed an amendment to the America Competes Bill expressing "the sense of the Senate that small businesses play a critical role in the economy, and that the Securities and Exchange Commission (SEC) and the Public Company Accounting Oversight Board (PCAOB) should implement Section 404 of the Sarbanes-Oxley law in a manner that limits the burdens placed on small and mid-size public companies" (Dodd-Shelby (2007)). As a result, the SEC is conducting its own study of the costs of Section 404 compliance to small firms (Manickavasagam (2007)).

The policy debate about the implementation of the Sarbanes-Oxley Act reflects the big question that each regulator faces: What is the optimal level of regulation for public firms?<sup>2</sup> Are the costs of new regulations excessive? Can regulation improve the quality of financial reporting? And ultimately, how does regulation affect the market valuation of firms? The critics of SOX have pointed to the high costs of enhanced disclosure especially for small firms. These costs include additional internal controls required to achieve compliance with the new regulation as well as the extra audit fees paid to the outside auditors attesting the management's assessment. The proponents of SOX argue that paying the price for the new procedures leads to improved financial reporting. Company earnings after SOX reflect the actual economic profits of the firm better, because management has less discretion when it comes to reporting firm performance. Weighing the benefits against the costs of SOX, especially for smaller firms, is thus of great importance. Unfortunately, tests of the effect of SOX are confounded by other contemporaneous events such as the demise of Arthur Anderson in 2002 and the general post-Enron scrutiny of corporate practices. It is difficult to answer the counterfactual: how would firms have behaved in the absence of SOX?

Studying the effect of SOX has proven to be a difficult question. In a review of the SOX

literature, Coates (2007) writes explicitly about the serious problems related to estimating the effects of the law. He stresses that assessing the effect of the Sarbanes-Oxley Act Section 404 rule is complicated by the fact that the law was enforced in the midst of significant financial, economic, and political changes. Leuz (2007) and Hochberg, Sapienza, and Vissing-Jorgensen (2009) also emphasize the lack of a control group of publicly traded firms that were not affected by the new regulation.

Ideally, to study SOX's effect, one would like to have an exogenous experiment in which firms were randomly assigned to comply with the new rules. This would allow us to compare the treated and non-treated firms' outcomes and to attribute any differences uniquely to the effect of the regulation.

Remarkably, something very close to such an experiment exists. The majority of US companies had to file their first management's report (MR) in their 10K and provide the first independent outside auditor's report with their annual reports for the fiscal year ending on or after November 15, 2004. However, small companies defined by a rule based on public float received a "stay of execution." Companies with a public float that did not exceed \$75 million in 2002, 2003 or 2004 were not required to comply with Section 404. In fact, given the choice, the overwhelming majority of firms opted out of compliance. (The public float is the part of equity not held by management or large shareholders, as reported on the first page of the company 10K.) Small companies finally had to submit a MR for fiscal year 2007, but are still exempt from an auditor's attestation of the MR with extensions stretching to December 2008.

The SEC had a similar approach to foreign incorporated firms. Foreign firms with a public float under \$700 million were not required to file an auditor's attestation to the MR in 2006, the first year when foreign firms had to file management's report. This provides a second set of firms where the effect of SOX compliance can be assessed.

In this paper, I use a regression discontinuity design that compares the companies that were just above the rule cutoff and had to file the report to companies that were just below the cutoff and did not have to file the report. This is a good quasi-natural experiment because the *exact* cutoff is not related to firm fundamentals. In addition, one must consider whether firms actively manipulated their public float to escape compliance. This paper uses the public float rule in 2002 to predict (instrument) the actual compliance in 2004. Firms with a public float over \$75 million in 2002 had to comply with Section 404 in 2004. However, in 2002 firms had no information about the way Section 404 would be implemented. Therefore, companies did not know that this threshold would be used to define 2004 compliance and were less likely to actively avoid having a public float above \$75 million.

The big advantage of the regression discontinuity design is that it can isolate the effects of SOX Section 404 compliance from the effects of the changing business climate (and any contemporaneous event) that would have affected all firms. The disadvantage of this approach is that it can look at small firms only. It is possible that the effect of Section 404 compliance is different for larger firms and hence the results do not to generalize to, for example, Fortune 500 type firms. However, small firms are interesting in themselves. First, there are, of course, more small firms than large firms. Second, the big complaint about Section 404 (and SOX compliance in general) has been that small firms pay disproportionately high costs because of the fixed cost nature of compliance. Third, small firms are likely to suffer more from asymmetric information and low reporting quality, and they could benefit most from the new regulation.

The goal of my paper is to measure the costs, the benefits, and the overall value impact of SOX, focusing on small firms. The costs are likely to be found in additional costs of compliance,

partly measurable as audit fees. The benefits are likely to be found in changes in how firms report earnings. The net effect is most likely found in firms' stock returns. Therefore, I investigate the audit fees as a direct measure of the costs of Section 404, the changes in reporting behavior proxied by firm accruals, and the stock returns around SOX related announcements as a measure of the net benefits of compliance. I find that the attestation of the management's report (MR) by outside auditors imposed significant costs for small firms. Filing an MR in 2004 increased audit fees by 98%, or \$697,890. With a median firm market size of \$110.9 million in 2004 and negative average earnings, this is not a small amount. My paper shows that the increase in audit fees was not driven by the general increase in auditing costs, but was SOX specific. Section 404 also led to more conservative reporting. MR filers had significantly lower accruals and discretionary accruals in 2004.<sup>3</sup> The effect is economically significant, with MR filers booking an estimated \$15.1 million less in discretionary accruals than non-filers. For small firms, this change is substantial. The mean and median earnings of my sample are negative \$4.8 million and \$1.4 million with a standard deviation of \$23.3 million. Finally, MR filers had higher event study returns around announcements of delays in Section 404 implementation. The buy-and-hold returns of MR filers was 17% lower than non-filers over the two year period starting with the announcement of the rule and ending after the filing of the 2004 annual reports. These results are confirmed with a sample of foreign firms that were near the 2006 implementation cutoff of \$700 million. Foreign firms that did not provide audit reports had 30% lower audit fees and 2.3% lower discretionary accruals. Event study evidence of foreign firm returns further indicates that the costs outweigh the benefits.

Some firms might have manipulated their public float in 2004 to avoid filing an MR. In all estimations I use an instrumental variables approach to check if the results are driven by firm selection. The IV estimates confirm that Section 404 compliance leads to higher audit costs and lower discretionary accruals.

My paper proceeds as follows: The next section reviews related literature. Section II discusses the identification strategy. Section III describes the data and provides summary statistics. Section IV presents the effect of the management's reports on audit fees, earnings management, and stock returns. Section V concludes.

# I The Setting

SOX is widely considered to be the most far-reaching securities legislation since the Securities Acts of 1933 and 1934. It not only imposes additional disclosure requirements, but more importantly, has substantive corporate governance mandates, a practice that is unprecedented in the history of federal securities legislation (Romano (2005)). Not surprisingly, SOX has generated much interest not only in the popular press, but also in the academic disciplines of financial economics, law and economics, and accounting. SOX sits at the center of debates about the intersection of regulation, auditing and control, and value and corporate governance.<sup>4</sup>

As early as 2003, Holmstrom and Kaplan (2003) pointed out that the overall US regulatory system had reacted adequately to governance problems prior to SOX. They suggested that new regulations were likely to further improve the current system, but recommended caution about overreacting to extreme events. They worried that SOX could burden smaller companies, because of fixed costs of complying. These are exactly the firms upon which this study focuses. A different perspective emerges in Hochberg, Sapienza, and Vissing-Jorgensen (2009). They document that the firms that lobbied against strict implementation of SOX experienced *positive* abnormal returns upon passage. They interpret this as a sign of the investors' positive expectations with regard to SOX implementation.

Coates (2007) reviews SOX regulations and the academic literature on the law's impact. He provides perhaps the best motivation for my paper – stating repeatedly that existing studies of SOX are confounded by the presence of contemporaneous economic, legal, and political events.

Serious problems confront any effort to estimate empirically the effects of Sarbanes-Oxley. The legislation was enacted amidst sharp financial, economic, and political changes. It makes a large number of simultaneous, disparate legal changes, which continue to be implemented and phased in over time. ... Given the corporate scandals of the early 2000s, and the awareness of this behavior by investors and other market participants, the chances are good that public and private enforcement and manager behavior would have changed even had Sarbanes-Oxley not been enacted.

The main contribution of my paper is the isolation of SOX's regulatory effects from other contemporaneous events.

The principal source of concern about SOX are the increased compliance fees, of which the auditing fees are an easily measurable component. The Financial Executives International (FEI (2005)) surveyed 217 large companies. The self-reported average one year increase in the audit fees due to SOX Section 404 was approximately \$1.3 million. The survey also suggests that the cost of internal and external people hours (excluding fees paid for auditor attestation) was \$3.1 million, thus exceeding the direct audit fees.

Ultimately, the important question of SOX is whether its net value effect was positive or negative. Chhaochharia and Grinstein (2007) classify firms as having inefficient internal control compliance if they have replaced their external auditors in the past. They find that such firms' value reacted relatively more positively to the announcement of SOX. Their identification strategy is probably not powerful enough to find a statistical significant effect for the small firms on which this study focuses.<sup>5</sup> Zhang (2007) reports large and statistically significant negative cumulative abnormal returns for the set of all firms around key SOX events. My study focuses on direct costs and effect on earnings, and uses clean treatment and control groups. I use hand collected public float information and actual filing status, rather than 2002 market capitalization data.

Marosi and Massoud (2008) find that the passage of SOX has reduced the overall benefits of U.S. listing. On the other side, Doidge, Karolyi, and Stulz (2009) find that the premium has not fallen significantly after the passage of SOX. A natural related question is whether some firms escaped SOX by "going dark." Engel, Hayes, and Wang (2007) claim that more firms went dark after 2002, and attribute this to SOX. I find that this is not an economically large phenomenon in my sample of smaller firms. Only 14 of 188 firms subject to compliance in my sample disappeared, and this is not statistically different from the number of disappearing firms not subject to compliance.

In sum, my paper uses a regression discontinuity technique that is considerably more powerful in measuring the actual quantitative impact among smaller firms, and in sorting out whether or not any measured effects are due to SOX.

# **II** Identification

The estimations in this study rely on regression discontinuity analysis – a technique commonly used in labor economics (Angrist and Levy (1999), van der Klaauw (2002), Black (1999)), with recent applications in finance (Rauh (2006), Roberts and Chava (2008)). Such a design can be used to assess SOX Section 404 because the SEC used a well defined rule to enforce Section 404. The regression discontinuity design compares the outcomes of firms that are just above and just below the Section 404 compliance cutoff.

Table I shows the SEC effective rule implementation dates. The SEC introduced the accelerated filer status for annual reports filed after Dec 15, 2002. Accelerated filers were defined as companies with public float (the part of equity that is not held by management or large shareholders) of more than \$75 million in the second fiscal quarter of a fiscal year. Once a company had become an accelerated filer, it was an accelerated filer in the subsequent years.<sup>6</sup> All accelerated filers had to complete their 10K filing within 75 days of their fiscal year end, rather than within the old deadline of 90 days. This new accelerated filing became effective for accelerated filers with a fiscal year ending on or after December 15, 2003.

All accelerated filers with a fiscal year ending on or after November 15, 2004 had to a file management's report and an auditor's attestation of that report under Section 404. I denote these firms as MR firms. Companies that were not accelerated filers as of their fiscal year ending on or after November 15, 2004 did not have to file a management's report in that year (non-MR firms). Those were companies that had a public float under \$75 million in their reports for fiscal years 2002 (11/2002 to 10/2003), 2003 (11/2003 to 10/2004), and 2004 (11/2004 to 10/2005). Compliance for small firms was further delayed, with Section 404 compliance becoming effective for all firms for the fiscal year ending in December 2007. However, small firms were given an additional one year extension stretching to December 2008 for filing an auditor's attestation to the management's report.

My study focuses on the firms that reported a public float between \$50 and \$100 million in 2004. (2004 was the first time companies were required to comply with Section 404.) Focusing on firms that were near the \$75 million cutoff reduces the bias from unobservable factors (such as firm investment opportunities) that might be correlated with the public float and the outcomes of interest (such as audit fees, earnings, and returns). I further include a flexible functional form of

the public float in my estimations, to eliminate any remaining continuous effect of the public float on the outcomes. If the differences in the public float are properly controlled and we ignore the possible firm manipulation of public float, then the estimated difference between MR and non-MR firms is directly attributable to filing the report. A typical estimation uses the model:

Dep. Var. = 
$$\beta_0 + \beta_1 \cdot MR + \beta_2 \cdot PFL + \beta_3 \cdot PFL^2 + \beta_4 \cdot PFL^3 + \gamma \cdot X + \varepsilon$$
, (1)

where MR is a dummy variable for firms that filed management reports, PFL is the public float reported on the company annual report, and X is a vector of controls defined in Section IV. The results do not change if I use a quadratic functional form. The results are similar if instead I use a difference-in-difference approach:

Dep. Var. = 
$$\beta_0 + \beta_1 \cdot MR \cdot d_{2004} + \beta_2 \cdot MR + \beta_3 \cdot (d_{2004}, d_{2003}, d_{2002}, d_{2001}) + \gamma \cdot X + \varepsilon$$
,(2)

where MR is a dummy variable for firms that filed management reports,  $d_{2004}$  is a dummy variable for the first year of compliance, and  $(d_{2004}, d_{2003}, d_{2002}, d_{2001})$  is a full set of year dummies. I use the difference-in-difference approach as a primary tool in assessing the effect for foreign firms, because they do not report their public float.

While regression discontinuity is an appealing research design, it rests on several assumptions. The rest of the section discusses assumptions and diagnostics in the context of the MR filing rule.

# **II.A Rule Implementation**

The sharp regression discontinuity design assumes that the rule fully explains which firms are treated. Figure IA.1 (internet appendix) shows the public float distributions of firms that were not accelerated filers in their previous fiscal years, categorized by their accelerated filer status. If a company was a non-accelerated filer in the previous year and its public float exceeds \$75 million in the current year then it automatically changes its status to accelerated filer. Accelerated filers that crossed the \$75 million public float threshold in 2002, 2003 or 2004, had to submit management's reports in 2004.<sup>7</sup>

There is a small number of firms that did not follow the rule in the first year of implementation. In 2002, twelve firms with a public float exceeding \$75 million (7.8% of firms) were nonaccelerated filers. This number drops to zero in 2003, and two firms (1.6%) in 2004.<sup>8</sup> Similarly, 30 firms (5.5%) reported being accelerated filers even though they had a public float under \$75 million in 2002. By 2004, only four firms (1%) filed a management's report and reported a public float of under \$75 million. Thus, the early misreporting can be attributed to the confusion over the new rules set by the SEC.

# **II.B** Rule Anticipation

Insert Figure 1

The regression discontinuity approach assumes that the firms did not anticipate the rule or did not have control over their public float. If firms have no perfect control over their stock price, or find changing their public float costly because they had to move away from the optimal level of public financing, then the OLS estimates will provide a measure of the true effect of compliance. However, if some firms changed their public float in order to avoid compliance, then the OLS estimates will be biased. The empirical evidence suggests that some firms reacted to the rule and evaded compliance. Figure 1 plots distributions of the public float by filing year for firms that were not affected by the rule up to that year. If firms were anticipating and actively trying to evade filing management's reports, then there should be an excess of firms with public floats of just under \$75 million. We do not observe a break in the public float distribution in 2002 and 2003. However, a disproportionate number of firms had public float of just under \$75 million in 2004. This suggests that a number of firms could have evaded filing a management's report by manipulating their public float. Firms can decrease their public float by increasing the holdings of management and big shareholders, or by repurchasing shares to decrease the total value of their outstanding equity. Gao, Wu, and Zimmerman (2009) provide evidence that firms tried to stay small to avoid crossing the compliance threshold. Nondorf, Singer, and You (2007) similarly find evidence that firms around the threshold significantly reduce their market value of equity during the threshold measurement quarters.

An inspection of the firms that reported a public float just under the cutoff in 2004 revealed the following examples of potential rule evasion.<sup>9</sup> TechTeam Global Inc. (TEAM) reported a public float of \$57.6 million in 2003 and \$73.2 million in 2004. However, over the same time period the firm stock price increased from \$6.39 to \$9.07. This stock price change implies a public float of \$81.8 million in 2004. If the TechTeam Global Inc. public float in 2004 was above \$75 million it should have filed an MR. The company definitive proxy statements reveals an increase in the percentage of total holdings of insiders from 46.5% before the date the 2004 public float was computed, to 53.5% after the date the 2004 public float was computed. The increase was due to adding three large shareholders. Moreover, in 2003 TechTeam Global Inc. repurchased and retired 2,000,000 shares of common stock worth \$12,545,000, further reducing the total market size of equity and thus the public float of the company. As a second example, Video Display Corp.

(VIDE) reported a public float of \$20.3 million in 2003 and \$73.8 million in 2004. However, the firm stock price (adjusted for a stock split) increased from \$9.13 to \$36.14 over the same time period, implying a public float of \$80.3 million in 2004.

## **II.C** Instrumental Variable Approach

I use an instrumental variable approach to account for potential public float manipulation. On June 5, 2003, the SEC announced that firms with public floats above \$75 million in 2002 or thereafter should comply with Section 404 (SEC release 33-8238). Companies had to comply for the first time in 2004, so they could manipulate their 2003 and 2004 public float. However, companies could not manipulate their public float in 2002 because they did not know about the rule at that point. I use a dummy variable equal to 1 if the company had a public float above \$75 million in year 2002 to instrument for filing an MR in 2004. I predict the probability for a firm to be treated in 2004 with the cutoff in 2002. Given the path dependence of the treatment rule, a company with public float just above \$75 million in 2002 had to comply with Section 404 in 2004.<sup>10</sup>

Instruments should fulfill two requirements: [1] Instruments should predict the actual treatment. The position of the company's public float with respect to the 2002 cutoff is a strong instrument for filing an MR because all firms that were above the \$75 million cutoff in 2002 became accelerated filers and had to file an MR in 2004. [2] Instruments should not have a direct effect on the outcome of interest. The exact position of the public float with respect to the \$75 million threshold in 2002 does not affect audit fees or earnings in 2004.

In the instrumental variables approach I estimate the following two stage model:

$$MR = \alpha_0 + \alpha \cdot PF75_{2002} + \theta \cdot X + \eta$$
(3)  
Dep. Var. =  $\beta_0 + \beta \cdot \widehat{MR} + \gamma \cdot X + \varepsilon$ ,

where MR is a dummy variable for firms that file management's reports; PF75<sub>2002</sub> is an indicator variable measuring if the firm had public float above \$ 75 million in 2002;  $\widehat{MR}$  is the predicted probability of filing an MR; and X is a vector of controls defined in Section IV.

## **II.D** Confounding Events

The regression discontinuity design assumes that the jump in outcomes between accelerated and non-accelerated filers in 2004 can be attributed to MR filing. In other words, there should be no confounding events that augment the effect of MR filing for firms just above and just below the \$75 million cutoff. However, the original purpose of the accelerated filer status was to speed up the annual report (10K) due date. Starting from 2003, an accelerated filer company had to produce an annual report 15 days earlier than a non-accelerated filer. In 2004, a firm that just became an accelerated filer had both to accelerate its filing and to submit a management's report. Thus, my study of 2004 outcomes cannot separate the effect of filing the management's report from the effect of accelerated filing. Fortunately, the effect of accelerated filing can be separately tested by repeating the 2004 cross-sectional estimations in 2003. In 2003, accelerated filers had to submit their annual reports earlier, but did not have to comply with Section 404. I perform the regression discontinuity estimations in 2003 to confirm that accelerated filing had no separate and significant effect on the outcomes of interest.

# **III** Sample and Descriptive Statistics

I collected data on public float, accelerated filer status and management's reports under Section 404 from the companies' annual 10K filings. The data for audit fees are from *Audit Analytics*, the accounting data are from *Compustat*, and the monthly stock return data are from *CRSP*.

The sample creation procedure (Table IA.I, internet appendix) starts with all companies that have *Compustat* equity market capitalization between \$30 and \$330 million at the end of their fiscal years ending between November 2003 and October 2004.<sup>11</sup> Foreign firms were excluded because they were not affected by the regulation in 2004. Financial firms (SIC $\geq$ 6000 & SIC<7000) were excluded because segments of the financial industry had regulations similar to SOX 404 already in place. This left 1,499 firms. For these firms, I hand collected public float data from their annual reports. There were 358 firms that did not report a public float in 2004 or reported a public float for a date different from their second fiscal quarter end. I analyze companies whose public float was between \$50 and \$100 million in 2004. The results do not change when I use alternative regions around the rule - \$60 to \$90 million and \$40 to \$110 million. In sum, this procedure identified a "universe" of 301 companies in 2004.<sup>12</sup>

The empirical analysis focuses on the firms that were close to the rule cutoff in fiscal year 2004 – the year the MR was first required. I check how many of the firms that expected to be affected by the new regulation left the sample before the compliance date in 2004. Out of the 188 accelerated filers in 2003 that were close to the \$75 million cutoff, 14 firms (7.4%) were not in the 2004 sample (11 mergers, one bankruptcy and two "delinquent in filing" delisting codes in *CRSP*), whereas out of the 149 non-accelerated filers eight firms (5.4%) dropped out of the *Compustat* (seven merger codes in *CRSP*). A linear probability model of firms disappearing from the sample in 2004 as a

result of their 2003 accelerated filer status shows a higher probability to drop out for accelerated filers (by 2.1%) but the relation is not statistically significant. This suggests that small firms did not evade Section 404 compliance by delisting.

The regression discontinuity design assumes that firms just above and just below the treatment cutoff are similar in their characteristics before the rule was implemented but differ in their outcomes after the rule takes effect. Table IA.III compares companies with a public float between \$50 and \$100 million that filed management's reports in 2004 with companies with a public float between \$50 and \$100 million that did not file management's reports in 2004. Both the MR filers and non-filers were small firms with an average equity market capitalization of about \$132 million. About 70% of the firms are listed on Nasdaq. The MR filers and non-filers have comparable assets, sales, book-to-market value of equity, use of big auditors, number of geographic segments, and fraction of firms listed on Nasdaq. However, they were statistically significantly different in their earnings and accruals. On average, firms that filed a management's report had 3.3% lower accruals scaled by assets. The difference is hard to explain by earnings manipulation to avoid SOX compliance, because under manipulation we would observe lower reported earnings for firms that try to lower their market size of equity and public float. The differences suggest that filing a management's report made firms more conservative in their earnings reports. MR filers had significantly higher audit fees, with a mean difference of \$433,000.

Next, I verify that the two groups of firms have similar characteristics in the year before compliance. In 2003, there were no statistically significant differences in mean accruals (Table IA.III). The eventual MR filers had significantly lower earnings due to lower cash flow from operations. Firms that eventually filed a management's report did not have statistically significant higher audit fees. Accelerated filers and non-accelerated filers did not differ significantly in their audit fees and accruals in 2003, the year before they had to comply with Section 404. (Accelerated filers were the firms that crossed the \$75 million cutoff in 2002 or 2003. These firms filed a management's report in 2004.) As expected, accelerated filers had a higher public float. They also had significantly higher market size of equity. These significant differences are in contrast to the 2004 sample, where the MR filers had similar average size as non-filers and the difference in their assets was not statistically significant compared to the assets of firms that did not file a report. The difference between the two years suggest that a number of firms could have evaded filing the report in 2004 by manipulating their public float. Section IV disentangles treatment and selection by instrumenting the filing of a management's report with the public float cutoff rule in 2002<sup>13</sup>.

# **IV** Empirical Results

# **IV.A** Audit Fees

Figure 2 plots the mean audit fees from 2002 to 2007 for accelerated and non-accelerated filers. Filing an MR more than doubled the audit fees. The audit fees of accelerated filers in 2002 (2003) were slightly higher by \$64,977 ( \$121,836) than those of non-accelerated filers. In contrast, the audit fees of accelerated filers in 2004 were higher by \$535,557 and remain significantly higher in the first four years of compliance. We observe a similar jump with a sample of firms that filed MRs for all four compliance years compared to firms that did not file an MR over the whole period.<sup>14</sup>

Table II estimates a set of regression discontinuity models for firms near the \$75 million cutoff. The estimation focuses on the 2004 cross section – the first year when management's reports were filed. The first regression uses an MR filer dummy and linear, quadratic, and cubic public float Insert Figure 2

Insert Table II

terms. This flexible functional form for the public float is included to control for possible nonlinear effects of the public float on audit fees. Section 404 compliance (the coefficient on the MR dummy variable) increased audit fees by 86.6%. All regressions control for industry fixed effects.

Regression 2 controls for more determinants of audit fees. If the MR dummy variable captures the differences between the filers and non-filers, the addition of the controls should not significantly change the MR coefficient. I include *firm size*, *assets*, and *sales* to control for the size of the company. Bigger companies pose a bigger auditing challenge and pay higher audit fees. Firm *leverage* and *receivables* proxy for the risk involved in auditing. Big auditing companies might have different expertise and accounting practices than smaller auditors. The number of *business and geographic segment* variables controls for business complexity. Regression 2 shows that after controlling for *firm size*, *assets*, *sales*, *big auditor*, and *number of business and geographic segments*, the MR effect on audit fees remains similar at 74.4%. This implies an increase of \$528,000 for the mean firm.

## A.1 Manipulation of the Public Float

The OLS regressions have to be interpreted carefully because firms could have manipulated their public float. It is reasonable to suspect that the firms that decreased their public float to avoid filing an MR are the firms that would have paid higher audit fee costs under Section 404. In this case, the OLS regressions will underestimate the true effect of the regulation because they compare the firms that did not actively avoid the regulation to firms that potentially avoided compliance. I instrument the filing of a management's report with a dummy variable measuring whether the public float is above the \$75 million cutoff in 2002. The company public float in 2002 predicts the 2004 treatment, and firms did not manipulate their 2002 float to avoid compliance. Table II columns

(3) to (4) repeat the OLS estimations with the instrumented MR status. The first stage estimations use a linear probability model. The partial *F*-tests of the instrument are highly significant with values in excess of 59. The IV estimations suggest that the effect of Section 404 on audit fees is even larger (up to one million annually). The difference between the OLS and IV estimators suggest that firms affected by Section 404 paid higher audit fees, and some firms that expected large increases in their audit fees evaded the regulation.

#### A.2 Specification Tests

The results are robust to excluding all firms that were very close to the cutoff of \$75 million in the year before compliance and had lower costs to manipulate (Table IA.VII). The alternative difference-in-differences approach, using a pooled estimation to compare the audit fees of filers and non-filers before and after the regulation effective date, produces results consistent with the cross-sectional estimation (Table IA.VII). We do not observe the same audit fee differences in 2002 and 2003, the two years before Section 404 compliance was implemented (Table IA.IX). To test for a mechanical bias due to functional form misspecification, I construct placebo cutoff rules, and estimate my results using these artificial rules. I do not find significant differences with cutoff rules at \$125 and \$150 million (Table IA.X).

## A.3 Magnitude of the Costs

I find that on average the MR filers had to pay \$698 thousand more in audit fees. FEI (2005) suggests that the additional Section 404 cost of internal people hours and external people hours exceeds the audit fees paid by the firms, and they put the compliance costs at \$2.3 million per

year. (Here I use the same proportion of audit costs to total Section 404 monetary costs as the ones reported in FEI (2005).) If we assume that these costs remain constant and firms that avoided filing a MR will be able to avoid it in the future, the total value reduction due to increased costs is in the range of \$15.3 million to \$46 million (with a 15% and 5% discount rate respectively). If we assume that the effect will be only temporary (three years) then the implied total value reduction will be in the range of \$6 million to \$6.6 million (with a 15% and 5% discount rate respectively). Adjusting for the average market size of equity of the firms in the sample, a three year compliance delay will lead to a stock price increase in the 4.6% to 5% range, and a permanent break from compliance can have a positive effect in the 12% to 35% range. The back-of-the-envelope computation shows that, under reasonable parameter values, Section 404 direct compliance costs alone can have significant valuation effect (a point further explored in Section C.2). Of course, Section 404 can have other costs including increased likelihood of litigation, bankruptcy, and additional strain on management. Some of these costs will be balanced with potential benefits like better corporate governance practices and improved financial reporting.

# **IV.B** Earnings Management

The pronounced intent of Section 404 was to improve the quality of financial reporting. This section investigates whether filing a management's report had a measurable effect on reported earnings of small firms<sup>15</sup>.

#### **B.1** Earnings Targets

The first test explores whether the distribution of earnings per share excluding extraordinary items (EPS) differs for MR filers and non-filers.<sup>16</sup> In particular, firms try to have positive EPS and meet and exceed their last year EPS. Figure 3 graphs the distribution of EPS and one year changes in EPS for MR filers and non-filers with public float between \$50 and \$100 million in 2004. It shows that the fraction of MR filers that report negative EPS is larger than the fraction of non-filers that report negative EPS. A linear probability model estimates a 19% higher probability of reporting negative EPS for MR filers, statistically significant at the 1% level. The results support the notion that filing an MR reduced the ability of firms to report positive earnings. Similarly, firms that do not file an MR meet their last year's EPS more often than filers do. A linear probability model estimates an 8% higher probability of not meeting last year's EPS for MR filers. This difference is not statistically significant at normal levels (*p*-value of 16%). In summary, the MR filers appear to have lost some of their discretion in reporting earnings.

#### **B.2** Measuring Accruals

The paper focuses on the part of earnings that is not cash flow (accruals), because that is exactly the part of earnings that is hard to verify and easier to manage. Because firms might have different accruals based on their industry and business practices, accruals are usually decomposed into normal accruals and discretionary accruals. Following Teoh, Welch, and Wong (1998), I use a cross-sectional version of the Jones (1991) model.<sup>17</sup> The procedure for constructing discretionary accruals is explained in detail in the internet appendix. In short, accruals are regressed on the change in sales and property, plant and equipment within each two digit SIC code in the full *Com*- *pustat* universe during a year, excluding the firm itself. All variables are scaled by past assets. Discretionary accruals are the difference between the actual accruals and the fitted accruals from the above procedure, with the additional adjustment of subtracting the change of trades receivables from the change in sales. This measure aims to isolate the part of accruals that is hard to explain based on the normal business of the firm. The results reported in this section do not change if I do not adjust for trades receivables.

Table III reports OLS and IV estimates for accruals and discretionary accruals in 2004. The regressions control for *operational cash flow, change in net income, negative cash flow in previous year, book to market ratio, big auditor,* and *market size of equity* in the previous year. The *operational cash flow, change in net income* and *negative cash flow* in previous year variables are included to control for the firm's level of real economic activity. The *book to market* ratio controls for firm growth opportunities. The *big auditor* variable accounts for the different accounting practices of big and small accounting firms. I also control for *market size of equity*. The *market size of equity* is lagged because contemporaneous earnings can influence the size of the company.

These controls are not exhaustive. The advantage of the regression discontinuity design is that it compares similar firms which renders it fairly robust to omitted variables. Therefore, the regression discontinuity design produces consistent estimates without controlling for all of the firm's observable and unobservable characteristics.

#### **B.3** Findings

Filing a management's report is associated with a 3.5% decrease in accruals when including all controls and industry fixed effects. This translates into \$5 million lower earnings for the mean

#### Insert Table III

firm. The effects of filing a management's report are similar with discretionary accruals. The OLS estimations yield a 3.9% decrease in discretionary accruals (significant at 5%), equivalent to \$5.5 million lower earnings for the mean firm. The difference in reported earnings cannot be explained by higher audit fees alone because section IV.A showed that the audit fee increase was about \$0.5 million.

Firms that anticipated that filing an MR would lead to large reduction in earnings had an incentive to evade the new rule. Table III shows that MR firms have an estimated 9.2% decrease in total accruals, which is equivalent to an earnings drop of \$12.9 million for the mean firm. The instrumented MR filers have a 10.8% drop in discretionary accruals, translating into \$15.1 million lower earnings, significant at the 1% level. The OLS estimates are significantly smaller than the IV. This verifies the intuition that firms expecting high discretionary accruals evaded filing management's reports.

#### **B.4** Robustness

Kothari, Leone, and Wasley (2005) show that the Jones model leads to a significant type I error in nonrandom samples. My design has a control group (non-filers) and treatment group (MR filers), and does not suffer from the common problem that the Jones model tends to produce non-zero discretionary accruals for selected sub-samples. The regression discontinuity design in effect matches the outcomes of similar treated and non-treated firms. As a general specification test, Table IA.XII checks whether the 2004 results appear to be spurious. The table shows that imposing an artificial rule at \$125 or \$150 million does not produce statistically significant differences in accruals between the placebo treatment and non-treatment groups. Next, if the current specification suffers from type I error, then we should observe similar error in previous years. Using a difference-

in-difference approach of comparing the 2004 difference in accruals to the difference in previous years leads to the same results as the cross-sectional estimations (Table IA.XIII). The differences we observe in 2004 are also not present in the cross-sectional estimations for the years before implementation – 2002 and 2003 (Table IA.XIV). Finally, ignoring the firms immediately under the \$75 million cutoff does not change the results (Table IA.XV).

# **IV.C** Stock Returns Evidence

SOX was enacted to benefit investors and firms. The previous sections show that filing an MR led to significant costs in terms of audit fees and made firms more conservative in their earnings reports. In addition, there were other costs and benefits associated with filing an MR. For example, firms had to pay for extensive internal auditing personnel and outside consultants (FEI (2005)). Consistent with this paper finding of less earnings management and more transparency, filing an MR might have reduced the firm cost of capital (Ashbaugh-Skaife, Collins, Kinney, and LaFond (2009)).

### C.1 Event Studies

The SEC press releases detailing the SOX implementation process provide a testing ground for the net valuational effect of compliance. The estimated reaction to regulation news will reflect the market's updated beliefs and not the full effect of the regulation. Furthermore, firms were given temporary extensions rather than permanent breaks from compliance, so the likely valuation effects of Section 404 compliance will be larger than the one estimated in this paper.

Table IV shows the three-day abnormal returns for three cumulative equal-weighted portfolios<sup>18</sup>:

[1] a portfolio that buys all companies that filed a management's report and were in the \$50 to \$100 million public float band in 2004; [2] a portfolio that sells all companies that did not file a management's report and were in the same band; and [3] a net portfolio. This section assumes that the market anticipates which firms will be subject to Section 404 compliance. If Section 404 imposes a net burden on firms, then the market reaction should be consistent with the following hypothesis:

**Hypothesis 1:** News about delays in Section 404 compliance will have a positive impact on firm valuation. News about SEC determination to enforce Section 404 will have a negative impact on firm valuation.

Based on this hypothesis, I predict the expected increase or decrease in valuation of the MR and non-MR portfolios around the ten events of interest (see signs in Table IV). To the extent that the MR and non-MR portfolios are expected to move in opposite directions or one of the portfolios is expected to react stronger, I also predict the sign of the portfolio that buys MR filers and sells non-filers.

The first event reported in Table IV is the SEC press release announcing the rule defining the accelerated filer status and acceleration schedule over the next three years. The press release had no impact on the equity value of MR filers and non-filers. In August 2002, the market did not expect a significant effect from acceleration or the event was already anticipated. The lack of reaction is consistent with the claim that firms did not actively avoid accelerated status in 2002 and 2003.

The next two events are the announcement of the deadline for filing an MR. The deadlines appeared in an WSJ article on May 28, 2003 and were officially enforced by the SEC with a ruling on June 5, 2003 (Solomon (2003)). The reaction to these events must be discussed in the context of the expectations before the news came (from the WSJ article):

Insert Table IV

The SEC originally sought to have companies comply with the new rules by September 2003, but given the expensive and time-consuming realities of meeting the new requirements, the deadlines have been pushed back.

Given the market expectation of earlier compliance dates, the effect of the two announcements is expected to be positive. The market reaction is indeed positive, with both dates having significant abnormal returns of 2.96% and 3.36% for the portfolio of MR filers and slightly lower returns (1.90% and 2.44%) for the non-filers. The two events are good news for both groups, so it is hard to predict the difference between the groups. The two event difference between the MR filers and non-filers is 1.97%, insignificant from zero at the 11% significance level.

These returns are benchmarked against the cumulative value-weighted market return. However, the announcements affected all companies and thus should affect the whole market. The news of regulatory delay coincides with a positive three day returns of 3.4% for a portfolio of large companies (S&P 500) over the two announcements (Figure IA.4). However, the return is much larger for small firms that receive a one year MR extension (11.7%), implying that SOX is considered costlier for smaller firms. Small firms that were not scheduled to comply immediately and received a two year extension still outperformed the large firms in S&P 500 by 4.1%.

The relatively minor three month extension of the compliance day announced on February 24, 2004 left the effective deadline for the majority of firms scheduled to comply unchanged because it left the deadline before the December 2004 fiscal year end. This event led to a statistically significant negative reaction of -1.57% for firms scheduled to comply.

Events 5, 6 and 7 announce extensions given to firms before their first MR filing deadline. The SEC proposed (event 5) and decided (event 6) to keep the accelerated filer deadline for filing annual reports at 75 days (after the fiscal year end date) instead of the planned change to 60 days. The decision should be positive news for MR filers because it delays the filing of the first MR and signals the softer stance of the SEC. The MR filer portfolio had a positive abnormal return of 1.44% and 1.97% on the two dates. On December 1, 2004 the SEC gave another 45 day postponement for filing the MR. The temporary extension was given to small companies, now with a market capitalization threshold of less than \$700 million (WSJ (2004)). The extension is good news for both MR filers and non-filers because it signals the softer SEC approach. The extension also suggests that future rule exceptions might be based on this new threshold. It is, however, reasonable to hypothesize that the effect will be stronger for MR filers because they received the actual relief. The estimated abnormal returns are 1.99% for MR filers, and 0.85% for non-filers, statistically significant for the MR filers only.

The press release on December 16, 2004 that the SEC would establish an advisory committee to examine the impact of SOX on smaller public companies drew a strong positive reaction (+2.04%) for the MR filers that were in the process of preparing their first reports.

On March 2, 2005 the SEC extended the deadline for MR filing for non-accelerated filers to July 2006. Consistent with the hypothesis, the press release had a positive impact for non-filers (1%), no effect for MR filers, and a negative return for the net portfolio. The actual abnormal returns have the predicted signs but are not large in magnitude. It is likely that by March 2005 the market was aware of the SEC intention to renew the small firm extension.

A *New York Times* article based on a day earlier SEC press release appeared on May 17, 2005 reporting the SEC intention to trim auditing costs (Norris (2005)). The chief accountant of the SEC, Donald T. Nicolaisen, presented a staff report encouraging auditors to use judgment to reduce the number of checks they perform and thus reduce the overall cost of auditing. The reported reduction in costs should be good news for both MR filers and non-filers, more so for the non-filers who have

to incur the initial cost of compliance. The three day non-filers' abnormal return outperformed filers by 1.76%.

#### C.2 Two Year Returns

As an alternative check of the valuation effect of Section 404, I construct an equal-weighted long-short portfolio. The equal-weighted portfolio longs the industry adjusted returns of all companies that should have complied with Section 404 given their starting public float in 2002 and the returns of their industry. The portfolio shorts the industry adjusted returns of all companies that should not comply with the rule by the virtue of their 2002 public float and industry returns. This indirect approach of assigning firms to portfolios eliminates the selection due to the ability of firms to manipulate their float after the rule was announced. Firms in the long portfolio were treated because of their initial public float and the change in their industry conditions<sup>19</sup>. To control for the risk of this portfolio I use the stock returns common risk factors identified in Fama and French (1993) and a momentum factor motivated by the findings in Jegadeesh and Titman (1993).

Insert Table V

Table V reports the 24 month Fama-French estimations for the period from May 2003 to June 2005. The period starts before the Sarbanes-Oxley Act implementation rule was announced and ends after the first managements' reports were filed. The constant term measures the return of the portfolio that cannot be explained by the four risk factors. The portfolio has a very significant monthly negative risk adjusted return of -0.81% per month. This implies an abnormal buy-and-hold negative return of 17.7% for the firms that had to comply with Section 404 as compared to the firms that did not have to comply. The negative 17.7% two year difference between predicted filers and non-filers is substantial. As already discussed in section A.3, if the market perceives Section 404 as a permanent tax on firms, costs can easily exceed the \$15 million mark, and trigger

a significant value drop for small firms.

In summary, the event responses and long term returns are consistent with a market perception that for small firms the costs of MR filing outweigh the benefits.

# **IV.D** Foreign Firms

The SEC also gave a temporary compliance break to "foreign private issuers" (foreign firms).<sup>20</sup> Foreign firms with a public float above \$700 million had to comply with Section 404 and file a management's report and an auditor attestation starting from July 15, 2006. Firms with a public float of under \$700 million were given a break and did not have to provide an auditor's attestation until July 15, 2007.<sup>21</sup> As expected, foreign firms that had to comply with the auditor's attestation requirement in 2006 were larger in terms of *market size, assets*, and *sales* than firms that did not have to provide an auditor's attestation (Table IA.V). They also are more likely to be audited by a *big auditor* firm and less likely to be *Nasdaq listed*. The comparison also reveals increases in the difference of audit fees and accruals for the auditor's attestation filers as compared to the previous year.

Foreign firms that had to include auditor's attestation in their annual reports paid 28% more in audit fees, and reported 1.7% less accruals and 2% lower discretionary accruals relative to firms that did not have to comply (Table IA.VI, Table IA.XI). The increased costs are smaller than those for US firms near the \$75 million cutoff. The smaller increase can be due to the fact that the estimations compare firms that file a management's report to firms that file a management's report and an auditor's attestation. Part of the audit fee jump for US firms can be due to filing a management's report and not to the cost of auditor's attestation. As previously discussed, firms

had an opportunity to evade compliance. That is why the 28% increase in audit fees should be a lower bound of the true increase. These results are consistent with the effect on US firms, but also underline the separate effect of auditor attestation on internal controls.

Table IA.XVI reports four events used to measure the impact of Section 404 compliance on foreign firms. The announcements of Section 404 delay led to a positive reaction for foreign firms, with a higher abnormal returns for the larger firms that had to comply first with the auditor's attestation requirement. The May 16, 2006 announcement that the SEC was committed to going through with Section 404 enforcement came just a month before the actual implementation date. The firm SEC commitment to Section 404 was bad news for both firms that were scheduled to provide auditor's attestation and firms that were given a temporary break. However, the negative impact was larger for the firms that would have to comply immediately with the auditor's attestation provision (the AA portfolio). AA filers had a negative three day abnormal return of 2.44%, while non-filers had a negative 1% abnormal return, with the difference being statistically significant -1.43%. The fourth event of interest near the 2006 compliance date was the WSJ report that the SEC is planning to ease the implementation rules in order to reign in the costs of compliance (Scannell and Solomon (2006)). Future filers had a positive return, outperforming the firms that already incurred the Section 404 costs by 1.62% in the three days around the announcement.

# V Conclusion

This paper uses the exogenous variation generated by the SEC implementation of Section 404 of SOX. It performs a regression discontinuity analysis, comparing the outcomes of firms around the Section 404 compliance cutoff. Its most significant contribution to the regulation literature is

its ability to disentangle the effect of SOX Section 404 from the effects of other contemporaneous events. The empirical results are strong and difficult to explain except in the context of SOX. Section 404 compliance led to a significant increase in costs and lower discretionary earnings for both domestic and foreign firms. The market reacted positively to news of delays in SOX implementation and negatively to news of the regulator's determination to carry on the implementation process. Firms that filed a management's report experienced significantly lower stock returns over the SOX implementation period.

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# Notes

<sup>1</sup>Section 302 of SOX has similar provisions that became effective earlier than Section 404. Section 404, however, mandates that outside auditors "attest" to the findings of the management. Furthermore, Section 404 was implemented in a way that requires that firms include their management's report on internal controls over financial reporting in their 10K filing.

<sup>2</sup>See Admati and Pfleiderer (2000), Glaeser, Johnson, and Shleifer (2001) and Zingales (2004) for the theoretical discussion behind this question. In a recent cross country experiment La Porta, Lopez-De-Silanes, and Shleifer (2006) find that extensive disclosure regulations are associated with large stock markets.

<sup>3</sup>Accruals are earnings minus cash flows. Discretionary accruals are the difference between the actual accruals and the normal accruals predicted by an accruals model.

<sup>4</sup>The results of this paper are related to the broader discussion about the benefits of regulation through enhanced disclosure (Bushee and Leuz (2005), Greenstone, Oyer, and Vissing-Jorgensen (2006)).

<sup>5</sup>They do try to control for contemporaneous events that affect both the firms that benefit and firms that do not benefit from Section 404. However, the weakness of their approach is that they have to assume which firms benefit from the law. Their study cannot account for the non random nature of firm governance practices prior to SOX. Some firms intentionally chose to institute good practices before SOX was passed.

<sup>6</sup>A company can become a non-accelerated filer after having been an accelerated filer in the previous year, but it should have revenues and public float of less than \$25 million in two consec-

utive years (SEC release 33-8182). In my sample no company switched from an accelerated filer in 2003 to a non-accelerated filer in 2004.

<sup>7</sup>There is legal uncertainty regarding the definition of an "affiliate" and hence the definition of a firms public float. In the 1997 SEC Release No. 33-7391, the SEC gave the definition: "A person shall be deemed not to be an affiliate for purposes of this section if the person: (i) is not the beneficial owner, directly or indirectly, of more than 10% of any class of equity securities of the issuer; (ii) is not an officer of the issuer; and (iii) is not a director of the issuer," but leaves the option that "Members of one or more of these classes may contend, nevertheless, that they are not affiliate status would be a 'facts and circumstances' test." I did not find evidence that firms changed their definition to avoid compliance.

<sup>8</sup>Some of these cases may be due to reporting errors. For example, of the two firms that had public float in excess of \$75 million and reported to be non-accelerated filers in 2004, only one did not file a management's report.

<sup>9</sup>The author cannot prove that these firms evaded filing an MR on purpose.

<sup>10</sup>The IV approach is not feasible for foreign firms, because they do not report public float.

<sup>11</sup> I refer to all companies with fiscal year ending between 11/2003 and 10/2004 as year 2003 companies, and all companies with fiscal year ending between 11/2004 and 10/2005 as year 2004 companies. The majority of the companies have a fiscal year end in December. 2004 was the first year when companies had to file management's reports under Section 404.

<sup>12</sup>Some of the firms in my sample are household names. For example, Princeton Review Inc, 1-800 Contacts Inc, and Friendly Ice Cream Corp are three firms in my sample that filed an MR in 2004, and Samsonite Corp, Books-a-million Inc, and Meade Instruments Corp are three firms in my sample that did not file an MR in 2004.

<sup>13</sup>For this identification strategy to work, firms should not sort in terms of their characteristics just above or just bellow the 2002 cutoff. To test the validity of my instrument, I have collected the inside ownership of the 127 firms closest to the 2002 cutoff – these are all firms in my sample with public float within \$10 million of the \$75 million cutoff. The firms above the cutoff have 23% mean executive ownership versus 20% for the firm under the cutoff. Similarly, on average 53% of the equity of the firms of the group above the cutoff is held by insiders versus 45% for the group under. The differences between the two groups are not statistically significant, with the standard deviation of the executive ownership standing at 17%, and of the overall insider ownership standard deviation at 23%.

<sup>14</sup>Raghunandan and Rama (2006)) used the jump in the time series of audit fees to estimate the effect of SOX compliance on audit costs. Their results are similar in magnitude to the estimations provided in this section. However, my paper goes a step further by showing that the increase in audit fees was in fact due to Section 404 compliance and not other contemporaneous events.

<sup>15</sup>Cohen, Dey, and Lys (2008) find that earnings management (discretionary accruals) increased between 1987 and 2001, and declined after the passage of SOX in 2002. It is not clear whether the observed changes are due to SOX or due to a changed business climate.

<sup>16</sup> Burgstahler and Dichev (1997) and Degeorge, Patel, and Zeckhauser (1999) show that firms try to meet benchmarks in their earnings. Graham, Harvey, and Rajgopal (2005) show that managers view EPS as a key performance metric.

<sup>17</sup>Unfortunately, my sample of firms becomes too small when I perform a time-series version

of the Jones model. My results are quantitatively similar and statistically significant when I use a difference-in-differences approach that compares the 2004 effect with the differences in previous years.

<sup>18</sup>Results are similar with five-day event window.

<sup>19</sup>The results are similar if I instead use the market return as a tool to predict the future compliance of the firms.

<sup>20</sup> For purposes of the Exchange Act, a "foreign private issuer" is any foreign issuer (other than a foreign government) except an issuer meeting the following conditions: (1) more than 50% of the issuer's outstanding voting securities are directly or indirectly held of record by residents of the U.S.; and (2) the majority of the executive officers or directors are U.S. citizens or residents; or more than 50% of the assets of the issuer are located in the U.S.; or the business of the issuer is administered principally in the U.S. See Exchange Act Rule 3b-4(c) [17 CFR 240.3b-4(c)].

<sup>21</sup> The foreign sample uses all foreign incorporated non-financial firms with market size of equity between \$350 million and \$2,750 million in 2005 (the year prior to the rule implementation for foreign firms) with data in *Compustat*. I choose the sample to be between 50% and 400% of the \$700 million public float cutoff. I expect that this band has most of the firms near the cutoff, and still keeps firm size comparable. The total sample consists of 160 firms, 86 of which filed both management's report and auditor attestation in 2006, while 74 filed only management's report.

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Rules Effective for Fiscal Years Ending on or after	Accelerated Filer Status	Management's Report Under Section 404	Annual Report Filing Deadline
prior to Dec 2002	No filer status mandated by SEC.	Not required.	The annual report deadline is 90 days after fiscal year end.
Dec 15, 2002	Companies with public float of more than \$75 mil- lion become accelerated filers. [ <i>SEC Rel.</i> 33-8128, <i>Sept.</i> 5, 2002]	Not required.	Reporting deadline stays at 90 days.
Dec 15, 2003	Companies with public float of more than \$75 mil- lion become accelerated filers. Companies that were accelerated filers in the previous year keep their accelerated filer status.	Not required.	The annual report dead- line for accelerated filers is changed to 75 days af- ter fiscal year end. Non- accelerated filers deadline remains 90 days. [ <i>SEC Rel.</i> <i>33-8128, Sept. 5, 2002 and SEC</i> <i>Rel. 33-8507, Nov. 17, 2004</i> ]
Nov 15, 2004	Companies with public float of more than \$75 mil- lion become accelerated filers. Companies that were accelerated filers in the previous year keep their accelerated filer status.	All companies that are accel- erated filers have to file man- agement's report. [ <i>SEC Rel.</i> <i>33-8392, Feb. 24, 2004</i> ]	Non-accelerated filers 90 days/Accelerated filers 75 days.
Dec 15, 2005	Companies with public float of more than \$75 mil- lion become accelerated filers. Companies that were accelerated filers in the previous year remain accelerated filers if their public float exceeds \$50 million, or change status to non-accelerated filers if their public float is less than \$50 million. [ <i>SEC Rel.</i> 33-8644, <i>Dec.</i> 21, 2005]	All companies that are accelerated filers have to file management's report. Non-accelerated filers do not have to file management's report.	Non-accelerated filers 90 days/Accelerated filers 75 days.

SOX signed into law on June 2002

The Sarbanes Oxley Act (SOX) was signed into law on July 30, 2002. The Securities and Exchange Commission (SEC) was put in charge of implementing Section 404. All US incorporated companies had to finally submit a MR for fiscal year 2007, but non-accelerated are still exempt from auditor's attestation of the MR (last extension stretches to December 2008). See the online appendix for the SEC Releases.





\$75 million up to the year plotted in each graph. For these firms being above the \$75 million cutoff means that they switch status to accelerated filer. Accelerated filers in years 2004 and 2005 had to file management's reports. The four graphs report fiscal years ending 2002 (11/2002 to Explanation: Public Float distribution of firms that were not affected by the rule up to the reported year. These firms had public float of less than 10/2003), 2003 (11/2003 to 10/2004), 2004 (11/2004 to 10/2005), and 2005 (11/2005 to 10/2006).



Figure 2: Audit Fees Annual Means.

period, with separate mean audit fees for accelerated filers (N=174 in 2004) and non-accelerated filers (N=127 in 2004). The Constant Sample graph further restricts to companies that have data for all 6 years, and filed MR for all four years of compliance (N=69) or did not file an MR for Explanation: The Full Sample graph uses all companies with public float between \$50 million and \$100 million in 2004 over the 2002-2007 all four years of compliance(N=21). Starting from 2004, accelerated filers had to comply with Section 404. Audit Fees are mean audit and audit related fees paid by the company to all its auditors for the relevant fiscal year.

Dependent Variable		Log Total Au	dit Fees 200	4
Estimation Type	(1) OLS	(2) OLS	(3) IV	(4) IV
MR in fiscal year 2004	0.866***	0.744***	1.171***	0.983***
	[7.57]	[7.39]	[4.95]	[3.65]
Log Sales 2004		0.031		0.034
		[1.09]		[1.09]
Log Assets 2004		0.235***		0.218***
		[3.35]		[2.79]
Log Market Size of Equity 2003		0.050		-0.052
		[0.51]		[-0.38]
Leverage 2004		0.612***		0.647***
		[2.62]		[2.75]
Receivables scaled by Total Assets 2004		0.086		0.129
		[0.35]		[0.55]
Big Auditor 2004		0.370***		0.373***
		[3.94]		[3.86]
Number of Business Segments 2004		0.040		0.047*
		[1.45]		[1.71]
Number of Geographic Segments 2004		0.070***		0.069***
		[2.91]		[2.77]
Public Float Terms	Yes	Yes	No	No
Industry Fixed Effects	Yes	Yes	Yes	Yes
Observations	281	281	281	281
R-squared	0.32	0.55	0.28	0.54
Implied Audit Fee Increase	614.24	528.11	830.78	697.89
First Stage Regression, MR instrumented	by PFL <sub>2002</sub> >	> \$75million	•	
including first stage controls, public float t	erms and fix	ed effects.		
$PFL_{2002} > $75Million$			0.466***	0.376***
			[10.15]	[7.74]
First Stage R-squared			0.21	0.33
First Stage Partial F-test			103.10	59.91

**Table II:** Audit Fees Regressions for fiscal year 2004.

**Explanation**: All OLS regressions are estimated with the model defined in section II, equation 2; the IV regressions are estimated with the instrumental variables model defined in section II, equation 3. The sample in estimations (1) to (4) covers all companies that had public float between \$50 and \$100 million in 2004. The dependent variable is logarithm of *Audit Fees*. In estimations (1) and (2) *MR* is a dummy variable equal to 1 if the company filed a management's report in 2004, in estimations (3) and (4) *MR* is the predicted treatment based on the first stage regression; The IV estimation uses the instrument PFL75<sub>2002</sub> – dummy equal to 1 if the company public float was above \$75 million in 2002. *Market Size of Equity* is measured in billions. The regressions include (but are not reported here) a constant term; the OLS estimations include a linear, quadratic, and cubic terms of *Public Float* – the public float reported in the annual reports. Regressions have the same cont**pa** and fixed effects as the second stage. *First Stage Partial F test* reports the F test of the instrument in the first stage regression. *Implied Audit Fee Increase* refers to the implied audit fee increase as a result of filing an MR for the mean company in \$ thousands. Robust t-statistics reported in brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 1%, respectively.

Figure 3: Earnings Per Share (EPS) and Change in EPS Distributions in 2004.



**Explanation**: The left graphs show EPS (Earnings Per Share excluding extraordinary items (EPSPX )) in 2004 and the right graphs show the difference between the EPS in 2004 and the EPS in 2003 in dollars. The top graphs show distribution of companies that did not file an MR and the bottom graph shows the distribution of companies that filed an MR. All graphs use companies that had public float between \$50 million and \$100 million. The graphs are based on 166 MR filers and 123 non-filers.

			-					
Dependent variable		ACC	ruals			DISCIE	onary Acci	ruals
Estimation Type	(1) OLS	(2) OLS	(3) IV	(4) IV	(2) OLS	(9) OLS	VI (7)	(8) IV
MR in fiscal year 2004	-0.042** [-2.50]	-0.035* [-1.90]	-0.060* [-1.68]	-0.092** [-2.23]	-0.0475*** [-3.092]	-0.039** [-2.23]	-0.074** [-2.25]	-0.108*** [-2.70]
Cash Flow from Operations 2004		-0.052 [-0 81]		-0.046 [-0.69]		-0.069 [-1 06]		-0.068 [-0 98]
Change in Net Income 2004		0.213*** [3.00]		0.207*** [2.82]		0.219*** [3.22]		[
Negative Cash Flow 2004		0.009 [0.41]		0.020 [0.89]		-0.016 [-0.66]		-0.005 [-0.20]
Book to Market 2004		0.043** [2.02]		0.040** [2.07]		0.044** [2.25]		0.043** [2.34]
Big Auditor 2004		-0.006 [-0.35]		-0.004 [-0.20]		0.015 [0.77]		0.020 [0.95]
Market Size of Equity 2003		-0.189 [-1.59]		0.065 [0.41]		-0.202 [-1.60]		0.086 [0.53]
Public Float Terms	Yes	Yes	No	No	Yes	Yes	No	No
Industry Fixed Effects	Yes	Yes	Yes	Yes	No	No	No	No
Observations	251	251	251	251	251	251	251	251
MR magnitude	-5.85	-4.98	-8.44	-12.93	-6.693	-5.46	-10.44	-15.14
R-squared	0.12	0.34	0.11	0.27	0.021	0.27	0.00	0.17
First Stage Regression, MR instrum	nented by H	$FL_{2002} >$	\$75Million	ı, including 1	first stage cor	ıtrols, publi	ic float tern	ns and fixed effects.
$PFL_{2002} > \$75Million$			0.442***	$0.386^{***}$			0.456***	0.394***
			[9.17]	[7.65]			[10.06]	[8.08]
First Stage R-squared			0.19	0.29			0.17	0.28
First Stage Partial F-test			84.17	58.59			101.28	65.23
<b>Explanation</b> : All OLS regressions are est instrumental variables model defined in sec million in 2004. The dependent variables a is a dummy variable equal to 1 if the com based on the first stage regression; see Table reported here) a constant term and linear, qu definitions. The IV estimation uses the instr first stage regressions have the same contro in the first stage regression. Robust t-statist respectively.	timated with stion II, equal re Accruals a pany filed an e IA.II for val adratic, and d undent PFL7: ols and fixed tics reported	the model c tion 3. The s and <i>Discretic</i> MR in 200 riables defini cubic terms c 5 <sub>2002</sub> – dum effects as th in brackets.	lefined in sec sample consis mary Accrua. 4; in the IV ( titon; Market ition; Market my equal to 1 e second stag *, **, and **	tion II, equati the of all comp ls, defined in a estimations ((3 <i>Size of Equity</i> <i>it</i> . Industry fix if the compan e. <i>First Stage</i> * denote two-s	ion 2; the IV n anies that had F ppendix C. In e (),(4), (7) and ( is in billions. T ed effects are bu y public float w <i>Partial F test</i> n ided statistical	egressions are ublic float be stimations (1) R is the he regressions he regressions used on the Fa as above $$75$ as above $$75$ eports the F t significance a	tween \$50 and (,(2), (5) and (,(2), (5) and (),(2), (5) and (),(2), (5) and (),(2), (5) and (),(2),(2) and (),(2),(2) and (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2),(2) (),(2) (),(2),(2) (),(2)	<i>with the ait \$100</i> (6) <i>MR</i> (6) <i>MR</i> eatment t are not 2 sector 02. The trument and 1%,

Table III: Accruals and Discretionary Accruals Regressions in Fiscal Year 2004.

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#	Event Date	Event Description [Expected Effect]	IM	R filers	IOU	n-filers	MR mi	nus no-MR
			Hypot.	Actual	Hypot.	Actual	Hypot.	Actual
(1)	8/27/2002	SEC Press Release No. 2002-128: Accelerated filer status definition and acceleration schedule.	none	– 0.42% [–0.57]	none	-0.67% [-0.62]	none	0.25% [0.23]
		[no effect expected because MR filing is not yet tied to acceleration rule]				,		1
(2)	5/28/2003	SEC Press Release No. 2003-66 & WSJ article: "SEC Sets a New Rule Aimed at Companies' Internal Controls" Testing the deadlines morted expected explicit deadline1	+	2.96% [3.57]***	+	1.90% $[2.23]^{**}$	-/+	1.05% [1.21]
(3)	6/5/2003	SEC Final Rule No. 33-8238: Rule giving one year delay of Section 404 compliance for accelerated filers and 2 years for non-accelerated filers.	+	3.36% [3.86]***	+	2.44% [2.83]***	-/+	0.92% [1.07]
(4)	24/02/2004	SEC Press Release No. 2004-21: three-month extension of the compliance dates, requirement for companies to include MR and auditor's attestation in the annual report. [some relief, but re-states the December 2004 deadline for most MR firms]	I	-1.57% [-2.17]**	+	-0.87% [-1.03]	I	-0.70% [-0.88]
(5)	8/26/2004	SEC Press Release No. 2004-121: SEC proposes accelerated filer status deadline change giving extra time for MR filers to comply. [softer SEC stance, immediate relief for MR filers]	+	1.44% [1.74]*	+	0.02% [-0.02]	+	1.46% [1.98]*
(9)	11/17/2004	SEC Press Release No. 2004-158: SEC announces relaxed accelerated filer deadline (remaining at 75 days instead of changing to 60). [softer SEC stance, immediate relief for MR filers]	+	1.97% [2.58]**	+	0.81% [1.26]	+	1.16% [1.60]
(1)	12/1/2004	SEC Press Release No. 2004-162 & WSJ article: Accelerated filers (with public float of under \$ 700 million) get a 45 day postponement of filing an MR. [softer SEC stance, immediate relief for MR filers]	+	1.99% [2.57]**	+	0.85% [1.33]	+	1.14% [1.60]
(8)	12/16/2004	SEC Press Release No. 2004-174: SEC Establishes Advisory Committee to Examine Impact of Sarbanes-Oxley Act on Smaller Public Companies. [SEC can reduce costs, direct benefit for MR filers]	+	2.04% [2.53]**	+	0.72% [1.10]	+	1.32% [1.80]*
(6)	3/2/2005	SEC Press Release No. 2005-25: Compliance dates for non-accelerated filers are extended to first fiscal year ending on or after July 15, 2006. [non-filers get a filing extension]	-/+	-0.15% [-0.22]	+	1.01% [1.61]	I	-1.17% [-1.72]*
(10)	5/17/2005	SEC Press Release No. 2005-74 and NYT article: Regulators Seek to Trim Cost of Rules On Auditing. [expected reduction in the cost of MR filing]	+	–0.93% [–1.2]	+	0.82% [1.06]	I	-1.76% [-2.51]**

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buys all companies that filed managements report and were in a \$50 to \$100 million band in 2004. Non-filers refers to the equal-weighted portfolio Explanation: The Hypot. columns report the expected market responses based on the hypothesis that delays in Section 404 compliance increase — expected negative reaction, none denotes no expected effect and +/- denotes unclear expected sign). MR filers refers to the equal-weighted portfolio that hat buys all companies that did not file managements report and were in the same band. MR minus no MR refers to the long-short portfolio. The estimations use a 120 day estimation window immediately before the event window. I estimate the market model:  $R_{it} = \alpha_i + \beta_{i1} \cdot MKTRF_t +$  $\beta_{i2} \cdot \text{SMB}_t + \beta_{i3} \cdot \text{HML}_t + \beta_{i4} \cdot \text{UMD}_t + \epsilon_{it}, \ E(\epsilon_{it}) = 0, \ \text{var}(\epsilon_{it}) = \sigma_{\epsilon}^2, \text{ for the 120 day estimation window immediately before the three provides the three structures are also be also be$ day event window, where  $R_{it}$  is the portfolio return and MKTRF<sub>t</sub>, SMB<sub>t</sub>,HML<sub>t</sub>, and UMD<sub>t</sub> are the return on the market, the Fama-French size, book-to-market and momentum factors. I use the predicted normal portfolio returns for the event window to calculate cumulative abnormal returns. For large estimation windows, the cumulative abnormal returns are distributed normally with expected value of 0 and variance of  $3 \cdot \sigma_{e}^{2}$  (MacKinley (1997)). Two sided z-stats reported in square brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 1%, respectively. market value and news of SEC determination to enforce the rule decrease market valuation( + denotes expected positive reaction,

### Table V: Two Year Returns.

$$\begin{aligned} R_{p,t} - R_{f,t} &= & - & 0.0081 & + & 0.110 \cdot (R_{m,t} - R_{f,t}) & - & 0.0346 \cdot \text{SMB}_t \\ & & [-2.21] * * & [0.98] & & [-0.25] \\ & + & 0.331 \cdot \text{HML}_t & + & 0.030 \cdot \text{MOM}_t & (R^2 = 21.8\%) \\ & & [1.88] * & [0.32] \end{aligned}$$

**Explanation**: Monthly Fama-French estimations for the period from May 2003 to June 2005.  $R_{p,t}$  is the monthly return of a long-short equal-weighted portfolio. The portfolio longs the industry adjusted returns of companies that were predicted to comply with section 404 based on their 2002 public float and their industry returns. The portfolio shorts the industry adjusted returns of companies predicted not to comply with section 404 based on their 2002 public float and their industry returns. All firms had to have 36 months of returns data in *CRSP* to predict their public float in 2003 and 2004. Industry adjusted firm returns in excess of  $\pm$  50% are not included in the portfolio.  $R_{f,t}$  is the risk free rate of return. ( $R_{m,t} - R_{f,t}$ ) is the excess return on the market. It is calculated as the equal-weighted return on all NYSE, AMEX, and NASDAQ stocks (from *CRSP*) minus the one-month Treasury bill rate. *HML* (High Minus Low) is the average return on the three small portfolios minus the average return on the three big portfolios. *MOM* is momentum factor – the average return on the two high prior return portfolios minus the average return on the two low prior return portfolios. *HML*, *SMB*, and *MOM* come from Kenneth French's web site at Dartmouth via WRDS. t-statistics reported in brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 1%, respectively.

# Internet Appendix to "The Effect of SOX Section 404: Costs, Earnings Quality and Stock Prices"\*

\* Peter Iliev, 2009, Internet Appendix to "The Effect of SOX Section 404: Costs, Earnings Quality and Stock Prices," Journal of Finance, http://www.afajof.org/IA/2009.asp. Please note: Wiley-Blackwell is not responsible for the content or functionality of any supporting information supplied by the authors. Any queries (other than missing material) should be directed to the authors of the article.

# A Section 404 of the Sarbanes Oxley Act of 2002

SEC. 404. MANAGEMENT ASSESSMENT OF INTERNAL CONTROLS.

(a) RULES REQUIRED.—The Commission shall prescribe rules requiring each annual report required by section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) to contain an internal control report, which shall—

(1) state the responsibility of management for establishing and maintaining an adequate internal control structure and procedures for financial reporting; and

(2) contain an assessment, as of the end of the most recent fiscal year of the issuer, of the effectiveness of the internal control structure and procedures of the issuer for financial reporting.

(b) INTERNAL CONTROL EVALUATION AND REPORTING.—With respect to the internal control assessment required by subsection (a), each registered public accounting firm that prepares or issues the audit report for the issuer shall attest to, and report on, the assessment made by the management of the issuer. An attestation made under this subsection shall be made in accordance with standards for attestation engagements issued or adopted by the Board. Any such attestation shall not be the subject of a separate engagement.

# **B SEC Regulation**

SEC Release No. 33-7391, Sept. 5, 2002 Therefore, the Commission proposes to add the following to the

definition of affiliate in Rule 144.

A person shall be deemed not to be an affiliate for purposes of this section if the person: (i) is not the beneficial owner, directly or indirectly, of more than 10% of any class of equity securities of the issuer; (ii) is not an

officer of the issuer; and (iii) is not a director of the issuer.

• • •

The proposal clearly excludes from the definition persons who are not executive officers, directors or 10% holders. Members of one or more of these classes may contend, nevertheless, that they are not affiliates because they are not in a 'control' position. For such persons, the determination of affiliate status would be a 'facts and circumstances' test.

- **SEC Release No. 33-8128, Sept. 5, 2002** Companies have to declare if they are "accelerated filer. Under the final rules, accelerated deadlines will apply to a company after it first meets the following conditions as of the end of it fiscal year as of the end of their first fiscal year ending on or after December 15, 2002:
  - Its common equity public float was \$75 million or more as of the last business day of its most recently completed second fiscal quarter;
  - The company has been subject to the reporting requirements of Section 13(a) or 15(d) of the Exchange Act for a period of at least 12 calendar months;
  - The company has previously filed at least one annual report pursuant to Section 13(a) or 15(d) of the Exchange Act; and
  - The company is not eligible to use Forms 10-KSB and 10-QSB.

Once a company becomes an accelerated filer, it remains an accelerated filer subject to shortened deadlines unless and until it subsequently becomes eligible to use Forms 10-KSB and 10-QSB for its annual and quarterly reports. To become eligible to use these forms, a company must have revenues and public float of less than \$25 million for two consecutive years. Accelerated filers will have annual report deadlines accelerated from 90 days to 60 days in 3 years. The annual report deadline will remain 90 days for year one and change from 90 days to 75 days for year two and from 75 days to 60 days for year three and thereafter.

Currently, companies are required to disclose on the cover page of their annual report on Form 10-K their public float as of a specified date within 60 days before filing. To assist investors and the Commission in evaluating whether a company is subject to accelerated deadlines, we are revising this requirement. We are requiring every company, regardless of whether it is an accelerated filer, to disclose its public float as computed on the last business day of the company's most recently completed second fiscal quarter. We recognize that this will reduce the currency of this disclosure, but we believe such a change will simplify the burdens companies face by requiring them to calculate only one public float amount. Also, to clarify further a company's filing status, we are requiring each company to check a box on the cover of its quarterly and annual reports to indicate whether it is an accelerated filer.

**SEC Release No. 33-8238, June 5, 2003** As directed by Section 404 of the Sarbanes-Oxley Act of 2002, we are adopting rules requiring companies subject to the reporting requirements of the Securities Exchange Act of 1934, other than registered investment companies, to include in their annual reports a report of management on the company's internal control over financial reporting. (The COSO Framework defined internal control as "a

process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives" in three categories - effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations.) The internal control report must include: a statement of management's responsibility for establishing and maintaining adequate internal control over financial reporting for the company; management's assessment of the effectiveness of the company's internal control over financial reporting as of the end of the company's most recent fiscal year; a statement identifying the framework used by management to evaluate the effectiveness of the company's internal control over financial reporting; and a statement that the registered public accounting firm that audited the company's financial statements included in the annual report has issued an attestation report on management's assessment of the company's internal control over financial reporting. Under the new rules, a company is required to file the registered public accounting firm's attestation report as part of the annual report. A company that is an "accelerated filer" as of the end of its first fiscal year ending on or after June 15, 2004, must begin to comply with the management report on internal control over financial reporting disclosure requirements in its annual report for that fiscal year. A company that is not an accelerated filer as of the end of its first fiscal year ending on or after June 15, 2004, including a foreign private issuer, must begin to comply with the annual internal control report for its first fiscal year ending on or after April 15, 2005.

- SEC Release No. 33-8392, Feb. 24, 2004 The compliance dates are extended as follows: A company that is an "accelerated filer" must begin to comply with the management report on internal control over financial reporting requirement and the related registered public accounting firm report requirement for its first fiscal year ending on or after November 15, 2004. A non-accelerated filer must begin to comply with these requirements for its first fiscal year ending on or after July 15, 2005. A foreign private issuer that files its annual report on Form 20-F or Form 40-F must begin to comply with the corresponding requirements in these forms for its first fiscal year ending on or after July 15, 2005.
- **SEC Release No. 33-8507, Nov. 17, 2004** Under the amended rules, the deadline for an accelerated filer to file its annual report for its fiscal year ending on or after December 15, 2004 will remain at 75 days after fiscal year end. The current year two deadlines therefore will remain in place for one additional year, which is year three of the phase-in period. The phase-in schedule will resume in year four, during which an accelerated filer will have to file its annual report within 60 days after its fiscal year ending on or after December 15, 2005.
- **SEC Release No. 33-8545, Mar. 2, 2005** The compliance dates are extended as follows: A company that is a nonaccelerated filer, or foreign private issuer that files its annual reports on Form 20-F or Form 40-F, must begin to comply with these requirements (to include in their annual reports a report of management on the companys internal control over financial reporting) for its first fiscal year ending on or after July 15, 2006.
- **SEC Release No. 33-8618, Sep. 22, 2005** The compliance dates are extended as follows: A company that is not an accelerated filer must begin to comply with these requirements ( to include in their annual reports a report of management on the companys internal control over financial reporting) for its first fiscal year ending on or after July 15, 2007.
- SEC Release No. 33-8644, Dec. 21, 2005 We are adopting amendments to the accelerated filing deadlines that apply

to periodic reports so that a large accelerated filer (an Exchange Act reporting company with a worldwide market value of outstanding voting and non-voting common equity held by non-affiliates of \$700 million or more) will become subject to a 60-day Form 10-K annual report filing deadline, beginning with the annual report filed for its first fiscal year ending on or after December 15, 2006. Until then, large accelerated filers will remain subject to a 75-day annual report deadline. Accelerated filers will continue to file their Form 10-K annual reports under a 75-day deadline, with no further reduction scheduled to occur under the revised rules.

A company that filed its last quarterly report as an accelerated filer and had an aggregate worldwide market value of the voting and non-voting common equity held by its non-affiliates of less than \$50 million, as of the last business day of its most recently completed second fiscal quarter, will no longer be considered an accelerated filer, as of the end of its fiscal year, and may begin to file reports on a non-accelerated basis, beginning with Form 10-K annual reports for fiscal years ending on or after December 15, 2005.

- **SEC Release No. 33-8730A, Aug. 9, 2006** We are extending the compliance date for foreign private issuers that are accelerated filers, but not large accelerated filers, for amendments to Forms 20-F and 40-F that require a foreign private issuer to include in its annual reports an attestation report by the issuers registered public accounting firm on managements assessment on internal control over financial reporting. The compliance dates are extended as follows: A foreign private issuer that is an accelerated filer, but not a large accelerated filer and that files its annual report on Form 20-F or Form 40-F, must begin to comply with the requirement to provide the auditors attestation report on internal control over financial reporting in the annual report filed for its first fiscal year ending on or after July 15, 2007.
- **SEC Release No. 33-8760, Dec. 15, 2006** A non-accelerated filer is not required to provide managements report on internal control over financial reporting until it files an annual report for its first fiscal year ending on or after December 15, 2007. If we have not issued additional guidance for management on how to complete its assessment of internal control over financial reporting in time to be of sufficient assistance in connection with annual reports filed for fiscal years ending on or after December 15, 2007, we will consider whether we should further postpone this date. A non-accelerated filer is not required to file the auditors attestation report on internal control over financial reporting until it files an annual report for its first fiscal year ending on or after December 15, 2007.

A foreign private issuer that is a large accelerated filer under the Exchange Act Rule 12b2 definition, and that files its annual reports on Form 20F or Form 40F, must begin to comply with the internal control over financial reporting and related requirements in the annual report for its first fiscal year ending on or after July 15, 2006. A foreign private issuer that is an accelerated filer, but not a large accelerated filer, under the definition in Rule 12b-2 of the Exchange Act, and that files its annual report on Form 20-F or Form 40-F, must begin to comply with the requirement to provide the auditors attestation report on internal control over financial reporting in the annual report filed for its first fiscal year ending on or after July 15, 2007.

**SEC Release No. 33-8934, Dec. 15, 2006** Under the amendments, a non-accelerated filer will be required to file the auditors attestation report on internal control over financial reporting when it files an annual report for a fiscal year ending on or after December 15, 2009.

# **C** Discretionary Accruals Measures

Total Accruals are income before extraordinary items minus cash flow from operations (IBC – OANCF + XIDOC) scaled by previous year assets (AT), values in excess of  $\pm$  100% censored. Discretionary accruals are estimated as follows. I use the cross-sectional abnormal accruals model first introduced by Jones (1991). Accruals (A<sub>it</sub>) is (Earnings Before Extraordinary Items (AT) minus Operating Cash Flow from continuing operations (XIDOC – OANCF)). The motivation comes from Hribar and Collins (2002) who find that using the balance sheet approach to test for earnings management can lead to wrong inference when the the partitioning variable used to indicate earnings management is correlated with mergers, acquisitions or discontinued operations. A<sub>it</sub> are modeled as:

$$\frac{\mathbf{A}_{it}}{\mathbf{Assets}_{i,t-1}} = b_1 \left(\frac{1}{\mathbf{Assets}_{i,t-1}}\right) + b_2 \left(\frac{\Delta \mathbf{Sales}_{it}}{\mathbf{Assets}_{i,t-1}}\right) + b_3 \left(\frac{\mathbf{PPE}_{it}}{\mathbf{Assets}_{i,t-1}}\right) + \epsilon_{i,t} \tag{4}$$

within each 2 digit SIC code with 8 companies in the full *Compustat* universe during a year. The regression is estimated for each firm and year excluding the firm from the estimation. *Sales* is net sales (SALE), *Assets* is total assets (TA) and *PPE* is property, plant and equipment (PPEGT). The estimated coefficients  $b_1$ ,  $b_2$  and  $b_3$  are used to estimate the non-discretionary level of accruals NDA<sub>*it*</sub>:

$$NDA_{it} = \hat{b_1} \left( \frac{1}{Assets_{i,t-1}} \right) + \hat{b_2} \left( \frac{\Delta Sales_{it} - \Delta AR_{it}}{Assets_{i,t-1}} \right) + \hat{b_3} \left( \frac{PPE_{it}}{Assets_{i,t-1}} \right)$$
(5)

where  $\Delta AR_{it}$  is the change in receivables (RECT). This adjustment for receivables is known as the modified Jones model. It is done under the assumption that all increases in receivables are discretionary. Results do not change if I do not adjust for receivables.

Discretionary accruals are defined as

$$\frac{\mathrm{DA}_{it}}{\mathrm{Assets}_{i,t-1}} = \frac{\mathrm{A}_{it}}{\mathrm{Assets}_{i,t-1}} - \mathrm{NDA}_{it}.$$
(6)

# **D** Tables And Figures

Sample	Change	Companies
All <i>CRSP/Compustat Merged Industrial Annual</i> database companies with fiscal year ends between 11/2003 and 10/2004		7,331
Companies with market size of equity between \$30 million and \$330 million	(4689)	2,642
Companies with US Incorporation	(199)	2,443
Non-financial companies (SIC<6000 & SIC≥7000)	(944)	1,499
Companies with public float data for fiscal year 2004 (11/2004 and 10/2005) computed in the end of their second fiscal quarter	(358)	1,141
Companies with 2004 public float between \$50 and \$100 million	(840)	301

# Table IA.I: Sample Creation Procedure

The sample in subsequent estimations requires that all used variables are non-missing.

Figure IA.1: How Strictly was the SOX Section 404 Enforcement Rule Followed?



accelerated filers or did not file a management's report when their reported public float was above \$75 million are referred to as violators, while Explanation: Public Float distribution of firms that were not affected by the rule up to the reported year. These firms had public floats of less than \$75 million up to the year plotted in each graph and thus were not accelerated filers in the previous year. For these firms being above the \$75 million cutoff means that they switch status to accelerated filer. Accelerated filers in years 2004 and 2005 have to file management's reports. and the firms that did not report accelerated status (2002 and 2003) or file management's report(2004 and 2005). The four graphs report fiscal years 2002 (11/2002 to 10/2003), 2003 (11/2003 to 10/2004), 2004 (11/2004 to 10/2005), and 2005 (11/2005 to 10/2006). Firms that were not The graphs plot separately histograms of firms that reported accelerated filer status (2002 and 2003) or filed management's report(2004 and 2005) firms that declared to be accelerated filers or filed a management's report when their public float was under \$75 million are referred to as volunteers.





Public Float Distribution of firms that filed an MR in 2004.

Public Float Distribution of firms that did not file an MR in 2004.



# Table IA.II: List of Variables

Variable	Units	Description
Public Float	\$ millions	Public Float reported on the company's annual report.
Market Size of Equity	\$ millions	Fiscal year end stock price multiplied by the number of shares outstanding (PRCC_F $\times$ CSHO)
Assets	\$ millions	Total Assets (AT)
Sales	\$ millions	Net Sales (SALE)
BE/ME	Ratio	Total Common Equity (CEQ) plus Deferred Taxes & Invest Tax Credit (TXDITC) (if available) minus Preferred Stock – Redemption (PSTKRV), Liquidating (PSTKL) or Carrying Value (UPSTK), used in that order, divided by market value of equity at the end of the fiscal year (PRCC_F $\times$ CSHO)
Audit Fees	\$ millions	Total audit and audit related fees from Audit Analytics
Earnings (scaled by assets)	Ratio	Income Before Extraordinary Items (IBC) scaled by previous year assets (AT). Values in excess of $\pm$ 100% were censored.
Leverage	Ratio	Long-term debt (DLTT)+Debt in Current Liabilities (DLC) divided by Long-term debt (DLTT)+Debt in Cur- rent Liabilities (DLC) + Market Size of Equity
IPO Year	Year	Company Initial Public Offering Date (IPODATE)
Receivables (scaled by assets)	Ratio	Inventories (INVT) plus Receivables (RECT) scaled by Total Assets (AT)
Cash Flow from Operations (scaled by assets)	Ratio Operating Cash Flow from continuing operations (XIDOC – OANCF) scaled by previous year assets (TA). Values in excess of $\pm$ 100% were censored. Ratio Change in Net Income (NI) scaled by previous year assets	
Change in Net Income (scaled by assets)	Ratio	Change in Net Income (NI) scaled by previous year assets (TA).
Negative Cash Flow in 2003	Y/N	Dummy variable equal to 1 if previous year Cash Flow from Operations is negative.
Accruals (scaled by assets)	Ratio	Total Accruals are income before extraordinary items mi- nus cash flow from continuing operations (IBC – OANCF + XIDOC) scaled by previous year assets (AT). Values in excess of $\pm$ 100% were censored.
Big Auditor	Y/N	Dummy variable equal to 1 if the company used one of the big auditing firms ( Deloitte & Touche, Ernst & Young, KPMG, PricewaterhouseCooper)
Number of Business Segments	Integer	Number of business segments from Compustat Segments
Number of Geographic Seg- ments	Integer	Number of geographic segments from Compustat Segments
NASDAQ listed	Y/N	Dummy variable equal to 1 if the company is traded on NASDAQ

All non-ratio variables are measured in millions. COMPUSTAT data items in parenthesis.

			2004 Sampl	e	200	4 Sample in	2003		2003 Samp	e
Variable	Units	MR	No MR	Diff.	MR	No MR	Diff.	ACC	No ACC	Diff.
Public Float	\$ mill	81.41	62.30	19.11	80.09	40.04	40.05	79.28	59.92	19.37
		(13.26)	(7.63)	$[14.38]^{**}$	(43.83)	(17.44)	$[9.09]^{***}$	(12.12)	(7.23)	$[16.05]^{***}$
Market Size	\$ mill	135.01	132.29	2.72	130.64	91.85	38.79	157.41	126.17	31.25
		(87.82)	(169.10)	[0.18]	(57.11)	(52.73)	$[5.64]^{***}$	(66.07)	(65.69)	$[4.07]^{***}$
Assets	\$ mill	163.60	177.48	-13.88	164.72	179.86	-15.14	198.78	165.95	32.83
		(149.84)	(425.72)	[0.39]	(150.28)	(452.16)	[0.39]	(320.14)	(421.31)	[0.77]
Sales	\$ mill	220.12	201.74	18.38	219.97	196.70	23.27	218.69	220.36	-1.66
		(303.94)	(403.56)	[0.44]	(323.79)	(390.16)	[0.53]	(317.19)	(454.81)	[0.04]
BE/ME	Ratio	0.63	0.60	0.03	0.62	0.69	-0.07	0.57	0.52	0.05
		(0.44)	(0.39)	[0.50]	(0.40)	(0.46)	[1.29]	(0.40)	(0.38)	[0.97]
Leverage	Ratio	0.15	0.18	-0.03	0.16	0.22	-0.05	0.16	0.15	0.01
		(0.21)	(0.22)	[1.13]	(0.22)	(0.25)	$[1.83]^{*}$	(0.22)	(0.22)	[0.51]
IPO Year	Year	1995.49	1994.87	0.63	1995.43	1994.88	0.55	1995.74	1995.87	-0.13
		(4.22)	(5.62)	[0.89]	(4.26)	(4.64)	[0.81]	(4.16)	(3.71)	[0.23]
Big Auditor	\$ mill	0.816	0.750	0.065	0.879	0.818	0.061	0.909	0.858	0.050
		(0.39)	(0.43)	[1.35]	(0.33)	(0.39)	[1.38]	(0.29)	(0.35)	[1.36]
Number of Business Segments	Integer	1.77	2.12	-0.35	1.76	2.15	-0.38	1.66	1.87	-0.20
		(1.34)	(1.55)	$[2.05]^{**}$	(1.35)	(1.61)	$[2.10]^{**}$	(1.32)	(1.39)	[1.30]
Number of Geographic Segments	Integer	1.95	1.88	0.07	2.03	1.97	0.05	1.80	1.87	-0.07
		(1.99)	(1.71)	[0.33]	(1.98)	(2.09)	[0.21]	(1.71)	(2.24)	[0.29]
NASDAQ listed	λ/N	0.726	0.637	0.089	0.720	0.655	0.065	0.749	0.661	0.087
		(0.45)	(0.48)	[1.63]	(0.45)	(0.48)	[1.14]	(0.44)	(0.48)	$[1.65]^{*}$
Audit Fees	\$ mill	0.877	0.444	0.433	0.448	0.336	0.065	0.403	0.362	0.087
		(0.73)	(0.58)	[5.47]***	(0.51)	(0.46)	[1.14]	(0.33)	(0.48)	$[1.65]^{*}$
Earnings	Ratio	-0.109	-0.060	-0.049	-0.073	-0.012	-0.061	-0.081	-0.076	-0.004
(scaled by assets)		(0.23)	(0.27)	$[1.67]^{*}$	(0.18)	(0.18)	[2.74]***	(0.22)	(0.20)	[0.18]
Cash Flow from Operations	Ratio	-0.023	-0.007	-0.016	-0.008	0.041	-0.049	0.000	-0.005	0.005

companies in the 2004 Sample. The 2003 Sample uses all firms that report public float between \$50 and \$100 million in 2003. The descriptive All accelerated filers in 2004 filed an MR. Standard deviations reported under sample means. The Diff. column reports the difference in means Explanation: See Table IA.II for variables definition. The samples use all firms with non-missing observations for all variables (except for BE/ME and IPO year). The 2004 BE/ME samples has 261 firms and the 2004 IPO year sample has 199 firms. The 2004 Sample uses all firms that report public float between \$50 and \$100 million in 2004. Firms are divided into two groups - companies that filed management's reports (MR) and companies that did not file management's reports (No-MR). The (2004 Sample in 2003) reports the 2003 fiscal year descriptive statistics for the statistics are divided into two groups – companies that were accelerated filers (ACC) and companies that were not accelerated filers (No-ACC). between the two groups with robust t-statistics reported in square brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 127 175 110 157 124 168 1%, respectively. Observations

-0.009 [0.20]

> -0.081(0.13)

-0.053 (0.14)

-0.065

-0.053 (0.24)

-0.085 (0.23)

Ratio

(scaled by assets)

(scaled by assets)

Accruals

(0.18)

[0.57]

(0.12)

(0.12)

 $[2.09]^{**}$ -0.033

(0.12)

(0.14)

(0.19)-0.072 (0.11)

(0.20)

 $[2.42]^{**}$ -0.012 [0.83]

[0.62]

# Table IA.III: Descriptive Statistics for US Firms

Industry		٨R	Ň	)-MR
	Number	Percentage	Number	Percentage
Consumer NonDurables – Food, Tobacco, Textiles, Apparel, Leather, Toys	8	4.9%	9	5.7%
Durables – Cars, TV's, Furniture, Household Appliances	0	1.2%	4	3.8%
Manufacturing – Machinery, Trucks, Planes, Off Furn, Paper, Com Printing	16	9.9%	11	10.5%
Oil, Gas, and Coal Extraction and Products	4	2.5%	4	3.8%
Chemicals and Allied Products	4	2.5%	7	1.9%
Business Equipment – Computers, Software, and Electronic Equipment	48	29.6%	32	30.5%
Telephone and Television Transmission	7	1.2%	4	3.8%
Utilities	1	0.6%	ю	2.9%
Wholesale, Retail, and Some Services (Laundries, Repair Shops)	19	11.7%	15	14.3%
Healthcare, Medical Equipment, and Drugs	27	16.7%	15	14.3%
Finance	0	0.0%	0	0.0%
Other - Mines, Constr, BldMt, Trans, Hotels, Bus Serv, Entertainment	31	19.1%	6	8.6%
Total	162	100.0%	105	100.0%

Table IA.IV: Sectoral Distribution of Firms in US sample

**Explanation**: The table reports Fama-French 12 sector distribution for firms that report public float between \$50 and \$100 million in 2004. The sample is divided into two groups – companies that filed management's reports (*MR*) and companies that did not file management's reports (No-MR).

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			2006 Sample		2006	5 Sample in 2	2005
Variable	Units	AA	no AA	Diff.	AA	no AA	Diff.
Market Size	\$ mill	2263.05	989.52	1273.52	1681.31	747.51	933.80
		(1162.59)	(1003.77)	$[7.31]^{***}$	(681.53)	(466.90)	$[8.91]^{***}$
Assets	\$ mill	2406.18	1149.92	1256.26	2237.28	1147.97	1089.31
		(1841.20)	(2403.98)	$[3.71]^{***}$	(1856.01)	(2513.12)	$[2.89]^{***}$
Sales	\$ mill	1712.10	750.27	961.83	1607.51	787.27	820.23
		(1933.69)	(1712.47)	$[3.28]^{***}$	(1851.48)	(1792.06)	[2.57]**
BE/ME	Ratio	0.58	0.50	0.08	0.62	0.55	0.07
		(0.41)	(0.30)	[1.31]	(0.43)	(0.38)	[06.0]
Leverage	Ratio	0.21	0.17	0.05	0.23	0.17	0.06
		(0.19)	(0.20)	[1.46]	(0.20)	(0.21)	$[1.76]^{*}$
IPO Year	Year	1996.26	2000.13	-3.87	1995.58	1998.34	-2.76
		(6.15)	(4.30)	$[3.77]^{***}$	(5.87)	(3.71)	$[2.54]^{**}$
Big Auditor	\$ mill	0.965	0.822	0.143	0.974	0.790	0.185
		(0.19)	(0.39)	$[3.03]^{***}$	(0.16)	(0.41)	$[3.59]^{***}$
Number of Business Segments	Integer	2.11	2.01	0.09	2.27	2.05	0.22
		(1.83)	(1.59)	[0.34]	(1.96)	(1.52)	[0.70]
Number of Geographic Segments	Integer	3.32	3.07	0.25	3.40	3.28	0.12
		(2.62)	(2.99)	[0.56]	(2.60)	(3.16)	[0.25]
NASDAQ listed	Λ/N	0.212	0.548	-0.336	0.208	0.526	-0.319
		(0.41)	(0.50)	$[4.63]^{***}$	(0.41)	(0.50)	$[4.04]^{***}$
Audit Fees	\$ mill	2.259	0.869	1.390	1.478	0.719	0.759
		(2.26)	(1.08)	$[4.80]^{***}$	(1.69)	(0.81)	$[3.14]^{***}$
Earnings	Ratio	0.068	0.036	0.032	0.035	0.021	0.014
(scaled by assets)		(0.14)	(0.18)	[1.29]	(0.11)	(0.17)	[0.58]
Cash Flow from Operations	Ratio	0.130	0.080	0.050	0.104	0.094	0.010
(scaled by assets)		(0.15)	(0.17)	$[1.99]^{**}$	(0.10)	(0.13)	[0.51]
Accruals	Ratio	-0.062	-0.044	-0.018	-0.069	-0.073	0.003
(scaled by assets)		(0.07)	(60.0)	[1.39]	(0.08)	(0.10)	[0.22]
Observations		85	73		LL	57	

for BE/ME and IPO year). The 2006 BE/ME samples has 137 firms and the 2006 IPO year sample has 97 firms. The 2006 Sample uses all foreign firms with market size between \$175 and \$5,600 million in 2005. Firms are divided into two groups - companies that filed auditor's attestation of their management's reports (AA) and companies that did not file auditor's attestation of their management's reports (No-AA). The (2006 Sample in The Diff. column reports the difference in means between the two groups with robust t-statistics reported in square brackets. \*, \*\*, and \*\*\* denote Explanation: See Table IA.II for variables definition. The samples use all foreign firms with non-missing observations for all variables (except 2005) reports the 2005 fiscal year descriptive statistics for the companies in the 2006 Sample. Standard deviations reported under sample means. two-sided statistical significance at 10%, 5%, and 1%, respectively.

Dependent Variable	Audi	t Fees
Estimation	(1)	(2)
(Auditor Opinion on MR) x 2006	0.301**	0.277***
-	[2.41]	[3.79]
Auditor Opinion on MR	-0.013	
-	[-0.19]	
Lagged Market Size of Equity	0.074***	0.054**
	[3.05]	[2.37]
Log Assets	0.344***	0.551***
	[5.67]	[6.48]
Log Lagged Market Size of Equity	0.137***	-0.036
	[2.68]	[-0.85]
Leverage	0.826***	0.062
	[3.66]	[0.40]
Receivables scaled by Total Assets	1.502***	0.681*
	[6.24]	[1.84]
Big Auditor	0.482***	-0.094
	[4.72]	[-1.10]
Number of Business Segments	0.037**	0.042
	[2.04]	[1.58]
Number of Geographic Segments	0.048***	-0.006
	[3.90]	[-0.39]
Year Fixed Effects	Yes	Yes
Industry Fixed Effects	Yes	No
Firm Fixed Effects	No	Yes
Observations	726	726
R-squared	0.58	0.93
AA magnitude	478.90	440.50

Table IA.VI: Audit Fees with Difference-in-Differences Approach for Foreign Firms.

**Explanation**: All regressions use difference-in-differences estimation technique over the 2001-2006 period. Both estimations use the 2001-2006 observations of foreign incorporated companies that market size of equity between \$175 and \$5,600 million in 2005. The dependent variable is log of *Total Audit Fees* paid in 2004. (*Auditor Opinion on MR*) *x 2006* is a dummy variable equal to 1 in 2006 if the company had an auditor opinion about its MR in 2006 and 0 otherwise; *Auditor Opinion on MR* is a dummy variable equal to 1 for all years for companies that had an auditor opinion about their MR in 2006; *Audit Fee Change* refers to the implied audit fee change for the mean company in \$ thousands. See Table IA.II for variables definition. The regressions include (but are not reported here) a constant term. Industry fixed effects are based on the Fama-French 12 sector definitions. Robust t-statistics reported in brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 1%, respectively.

Dependent Variable	Log Tota	ll Audit Fees 2004
Estimation Type	(1) OLS	(2) OLS
MR in fiscal year 2004	0.744***	0.834***
	[7.39]	[6.32]
Log Sales 2004	0.031	0.026
	[1.09]	[0.83]
Log Assets 2004	0.235***	0.235***
	[3.35]	[3.03]
Log Market Size of Equity 2003	0.050	0.027
	[0.51]	[0.25]
Leverage 2004	0.612***	0.504*
	[2.62]	[1.97]
Receivables scaled by Total Assets 2004	0.086	0.244
	[0.35]	[0.83]
Big Auditor 2004	0.370***	0.343***
	[3.94]	[3.09]
Number of Business Segments 2004	0.040	0.059*
	[1.45]	[1.88]
Number of Geographic Segments 2004	0.070***	0.052*
	[2.91]	[1.93]
Public Float Terms	Yes	Yes
Industry Fixed Effects	Yes	Yes
Observations	281	232
R-squared	0.55	0.54

**Table IA.VII:** Audit Fees Regressions without Potential Evaders.

**Explanation**: All regressions use OLS estimation technique. The sample in estimations (1) and (3) covers all companies that had public float between \$50 and \$100 million in 2004. The sample in estimation (2) and (4) does not use firms that potentially evaded compliance with the rule. These are the firms that were non-accelerated filers in 2003 and reported public float just under the \$75 million rule in 2004 (with public float in 2004 between \$65 to \$75 million). The dependent variable is logarithm of *Audit Fees. MR* is a dummy variable equal to 1 if the company filed a management's report in 2004. *Market Size of Equity* is measured in billions; The regressions include (but are not reported here) a constant term; the OLS estimations include a linear, quadratic, and cubic terms of *Public Float* – the public float reported in the annual reports. Regressions control for industry fixed effects based on the Fama-French 12 sector definitions. The first stage regressions have the same controls and fixed effects as the second stage. *Audit Fee Change* refers to the implied audit fee change for the mean company in \$ thousands. Robust t-statistics reported in brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 1%, respectively.

Sample	2001,2002 and 2004	2001-2004
Dependent Variable	Audit Fee	es
Estimation	(1)	(2)
MR x 2004	0.590***	0.584***
	[7.11]	[7.75]
MR	0.144**	0.165***
	[2.56]	[3.78]
Lagged Market Size of Equity	0.039**	0.034**
	[2.05]	[2.36]
Log Assets 2004	0.167***	0.195***
	[4.08]	[5.95]
Log Market Size of Equity 2003	0.088***	0.035
	[2.66]	[1.29]
Leverage 2004	0.772***	0.709***
	[6.22]	[6.68]
Receivables scaled by Total Assets 2004	0.138	0.156
	[1.11]	[1.46]
Big Auditor 2004	0.421***	0.412***
	[7.79]	[9.00]
Number of Business Segments 2004	0.035**	0.027**
	[2.27]	[2.09]
Number of Geographic Segments 2004	0.061***	0.062***
	[4.68]	[5.80]
Year Fixed Effects	Yes	Yes
Industry Fixed Effects	Yes	Yes
Observations	794	1133
R-squared	0.62	0.58

Table IA.VIII: Audit Fees with Difference-in-Differences Approach for US Firms.

**Explanation**: All regressions use difference-in-differences estimation technique. Estimations (1) uses the 2001, 2002 and 2004 observations of US incorporated companies that had public float between \$50 and \$100 million in 2004. It does not use the 2003 data to account for rule anticipation. Estimation (2) uses the 2001, 2002, 2003 and 2004 observations for the same sample. The dependent variable is log of *Total Audit Fees* paid in 2004. *MR x 2004* is a dummy variable equal to 1 in 2004 if the company filed an MR in 2004 and 0 otherwise; *MR* is a dummy variable equal to 1 for all years for companies that filed an MR in 2004; see Table IA.II for variables definition. The regressions include (but are not reported here) a constant term. Industry fixed effects are based on the Fama-French 12 sector definitions. Robust t-statistics reported in brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 1%, respectively.

Sample	(A) l	Different Sa	umple	(B) Cor	nstant 2004	Sample
Estimation Type	(1) OLS	(2) OLS	(3) OLS	(4) OLS	(5) OLS	(6) OLS
Year	2004	2003	2002	2004	2003	2002
MR in 2004 or ACC in 2002 and 2003	0.744***	0.030	-0.153	0.744***	0.227***	0.235***
	[7.39]	[0.31]	[-1.59]	[7.39]	[2.92]	[2.92]
Log Sales 2004	0.031	0.037*	0.055***	0.031	0.050**	0.028
	[1.09]	[1.91]	[2.80]	[1.09]	[2.30]	[0.92]
Log Assets 2004	0.235***	0.278***	0.340***	0.235***	0.240***	0.167***
	[3.35]	[4.71]	[3.96]	[3.35]	[3.63]	[2.64]
Log Market Size of Equity 2003	0.050	-0.045	-0.097	0.050	-0.137**	0.094**
	[0.51]	[-0.74]	[-1.44]	[0.51]	[-2.21]	[2.03]
Leverage 2004	0.612***	0.784***	0.474*	0.612***	0.647***	0.762***
	[2.62]	[3.58]	[1.84]	[2.62]	[2.83]	[4.17]
Receivables scaled by Total Assets 2004	0.086	0.210	0.325	0.086	0.320	0.442**
	[0.35]	[1.12]	[1.35]	[0.35]	[1.43]	[2.45]
Big Auditor 2004	0.370***	0.258**	0.251	0.370***	0.417***	0.438***
	[3.94]	[2.37]	[1.64]	[3.94]	[4.05]	[4.14]
Number of Business Segments 2004	0.040	0.003	-0.016	0.040	0.001	0.042*
	[1.45]	[0.12]	[-0.57]	[1.45]	[0.06]	[1.79]
Number of Geographic Segments 2004	0.070***	0.066***	0.080***	0.070***	0.055***	0.070***
	[2.91]	[3.48]	[2.70]	[2.91]	[2.93]	[3.74]
Public Float Terms	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	281	298	281	281	279	274
R-squared	0.55	0.54	0.55	0.55	0.51	0.53

## Table IA.IX: Audit Fees In 2003 and 2002.

**Explanation**: All regressions use OLS estimation technique. Estimations (1) to (3) use the sample of all firms with public float between \$50 million and \$100 million in the respective year. *MR in 2004 or ACC in 2002 and 2003* is either the *MR* variable for 2004 or the accelerated filer status (*ACC*) for years 2002 and 2003. In 2004 all accelerated filers filed an MR. The goal is to test if the accelerated filer status had effect on *Audit Fees* in 2002 and 2003. Estimations (4) to (6) report the *MR in 2004* coefficient using the 2004 sample in 2002, 2003 and 2004. The goal is to test if firms that filed MR in year 2004 had significantly different *Audit Fees* from non-filers in 2002 and 2003. Estimations (4) to (6) use the sample of all firms with public float between \$50 million and \$100 million in 2004. Regressions (4) to (6) report the coefficient from the 2004 MR dummy in 2002, 2003 and 2004. The goal is to test if 2004 MR filers had significantly higher *Audit Fees* in 2002 and 2003. The dependent variable is log of *Total Audit Fees* paid in the relevant year. *MR* is a dummy variable equal to 1 if the company filed an MR in 2004; see Table IA.II for variables definition. The regressions include (but are not reported here) a constant term and linear, quadratic, and cubic terms of *Public Float*. Industry fixed effects are based on the Fama-French 12 sector definitions. Robust t-statistics reported in brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 1%, respectively.

Sample	\$ 125 million rule	\$ 150 million rule
Estimation Type	(1) OLS	(2) OLS
MR based on \$125M rule	0.004	
	[0.04]	
MR based on \$150M rule		0.093
		[0.73]
Log Sales 2004	0.024	0.086**
	[0.73]	[2.04]
Log Assets 2004	0.254***	0.218**
	[3.16]	[2.40]
Log Market Size of Equity 2003	0.168*	0.219*
	[1.76]	[1.75]
Leverage 2004	0.828***	0.821**
	[2.82]	[2.57]
Receivables scaled by Total Assets 2004	-0.335	-0.254
	[-1.13]	[-0.82]
Big Auditor 2004	0.339***	0.358**
	[2.99]	[2.50]
Number of Business Segments 2004	-0.008	0.027
	[-0.26]	[0.75]
Number of Geographic Segments 2004	0.089***	0.076***
	[3.34]	[3.19]
Public Float Terms	Yes	Yes
Industry Fixed Effects	Yes	Yes
Observations	185	150
R-squared	0.55	0.62

Table IA.X: Audit Fees with Placebo Rules.

**Explanation**: All regressions use OLS estimation technique. Estimations (1) reports the *MR based on \$125M rule* coefficients. *MR based on \$125M rule* is a dummy variable equal to 1 for companies that would have filed an MR if the three year treatment rule were based on a cutoff of \$125 million. The sample consists of all firms that had public float between \$100 million and \$150 million public float in 2004. Estimation (2) reports the *MR based on \$150M rule* is a dummy variable equal to 1 for companies that would have filed an MR if the three year treatment rule were based on a cutoff of \$150 million. The sample consists of all firms that had public float between \$100 million and \$150M rule is a dummy variable equal to 1 for companies that would have filed an MR if the three year treatment rule were based on a cutoff of \$150 million. The sample consists of all firms that had public float between \$125 million and \$175 million public float in 2004. The dependent variable is log of *Total Audit Fees* paid in 2004. *MR* is a dummy variable equal to 1 if the company filed an MR in 2004; see Table IA.II for variables definition. The regressions include (but are not reported here) a constant term and linear, quadratic, and cubic terms of *Public Float*.Industry fixed effects are based on the Fama-French 12 sector definitions. Robust t-statistics reported in brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 1%, respectively.

Estimation	(1)	(2)	(3)	(4)
Dependent Variable	TA	TA	DTA	DTA
(Auditor Opinion on MR) x 2006	-0.024*	-0.017	-0.017	-0.020
	[-1.84]	[-1.18]	[-1.25]	[-1.37]
Auditor Opinion on MR	0.011		0.027***	
in 2006	[1.62]		[3.37]	
Lagged Market Size of Equity	-0.001	0.005**	-0.001	0.003
	[-0.53]	[2.12]	[-0.21]	[1.02]
Cash Flow from Operations	-0.323***	-0.578***	-0.269***	-0.558***
	[-4.50]	[-8.03]	[-3.42]	[-6.68]
Change in Net Income	0.201***	0.235***	0.189***	0.233***
	[2.84]	[4.10]	[2.78]	[4.01]
Negative Cash Flow	-0.040**	-0.035**	-0.056***	-0.036*
	[-2.35]	[-2.01]	[-3.08]	[-1.90]
Book to Market	-0.006	-0.012*	0.003	-0.009
	[-1.14]	[-1.81]	[0.57]	[-1.30]
Big Auditor	-0.014	0.009	0.000	0.014
	[-0.99]	[0.59]	[0.00]	[0.89]
Year Fixed Effects	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	No	Yes	No
Firm Fixed Effects	No	Yes	No	Yes
Observations	813	813	813	813
MR magnitude	-37.79	-25.96	-27.43	-31.56
R-squared	0.22	0.61	0.13	0.54

 
 Table IA.XI: Accruals and Discretionary Accruals with Difference-in-Differences Approach for Foreign Firms.

**Explanation**: All regressions use difference-in-differences estimation technique. Estimations use the 2001 to 2006 period observations of foreign incorporated companies that market size of equity between \$175 and \$5,600 million in 2005. The dependent variables are *Accruals* (estimations (1) and (3)) and *Discretionary Accruals* (estimations (2) and (4)). (*Auditor Opinion on MR*) x 2006 is a dummy variable equal to 1 in 2006 if the company had an auditor opinion about its MR in 2006 and 0 otherwise; *Auditor Opinion on MR* is a dummy variable equal to 1 for all years for companies that had an auditor opinion about their MR in 2006; see Table IA.II for variables definition; *Market Size of Equity* is in billions. The regressions include (but are not reported here) a constant term. Industry fixed effects are based on the Fama-French 12 sector definitions. Robust t-statistics reported in brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 1%, respectively.

Dependent Variable	TA	DTA	TA	DTA
Estimation	(1)	(2)	(3)	(4)
MR based on \$125M rule	0.010	-0.015		
	[0.36]	[-0.61]		
MR based on \$150M rule			-0.007	-0.011
			[-0.23]	[-0.40]
Lagged Market Size of Equity	-0.065	-0.017	-0.028	-0.011
	[-0.90]	[-0.27]	[-0.31]	[-0.15]
Change in Net Income 2004	0.354***	0.330***	0.436***	0.372**
	[4.21]	[3.27]	[3.25]	[2.56]
Negative Cash Flow 2004	-0.002	0.020	0.014	0.025
	[-0.06]	[0.68]	[0.39]	[0.81]
Book to Market 2004	0.040	0.054*	0.031	0.036
	[1.53]	[1.80]	[0.89]	[1.13]
Big Auditor 2004	-0.024	-0.025	0.002	0.007
	[-0.99]	[-0.80]	[0.06]	[0.19]
Market Size of Equity 2004	0.088	0.034	0.137	0.113
	[0.40]	[0.16]	[0.59]	[0.49]
Public Float Terms	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	No	Yes	No
Observations	179	179	134	134
R-squared	0.40	0.29	0.48	0.37

Table IA.XII: Accruals and Discretionary Accruals Using Alternative (placebo) Rules.

**Explanation**: All regressions use OLS estimation technique. Estimations (1) and (2) report the *MR based on \$125M rule* coefficients. *MR based on \$125M rule* is a dummy variable equal to 1 for companies that would have filed an MR if the three year treatment rule were based on a cutoff of \$125 million. The sample consists of all firms that had public float between \$100 million and \$150 million public float in 2004. Estimations (3) and (4) report the *MR based on \$150M rule* coefficients. *MR based on \$150M rule* is a dummy variable equal to 1 for companies that would have filed an MR if the three year treatment rule were based on a cutoff of \$150 million. The sample consists of all firms that would have filed an MR if the three year treatment rule were based on a cutoff of \$150 million. The sample consists of all firms that had public float between \$125 million and \$175 million public float in 2004. The dependent variables are *Total Accruals(TA)* and *Discretionary Total Accruals (DTA)*, defined in appendix C. *MR* is a dummy variable equal to 1 if the company filed an MR in 2004; see Table IA.II for variables definition; *Market Size of Equity* is in billions. The regressions include (but are not reported here) a constant term and linear, quadratic, and cubic terms of *Public Float*.Industry fixed effects are based on the Fama-French 12 sector definitions. Robust t-statistics reported in brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 1%, respectively.

Sample	2001, 2002	2 and 2004	2001, 200	2, 2003 and 2004
Estimation	(1)	(2)	(3)	(4)
Dependent Variable	TA	DTA	TA	DTA
MR X 2004	-0.053***	-0.048**	-0.034*	-0.030*
	[-2.62]	[-2.31]	[-1.96]	[-1.67]
MR	0.036**	0.024*	0.016	0.007
	[2.50]	[1.74]	[1.51]	[0.65]
Lagged Market Size of Equity	-0.098**	-0.151***	-0.104**	-0.164***
	[-2.13]	[-4.03]	[-2.40]	[-4.37]
Cash Flow from Operations	0.047	0.048	0.060	0.052
	[0.72]	[0.79]	[1.13]	[1.03]
Change in Net Income	0.068	0.069	0.076*	0.083*
	[1.34]	[1.37]	[1.74]	[1.86]
Negative Cash Flow	0.011	-0.010	0.022	0.005
	[0.61]	[-0.59]	[1.44]	[0.33]
Book to Market	0.004***	0.004***	0.004***	0.004***
	[9.33]	[8.50]	[9.69]	[8.90]
Big Auditor	0.006	0.013	0.008	0.012
	[0.40]	[0.84]	[0.62]	[0.94]
Year Fixed Effects	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	No	Yes	No
Observations	716	716	1021	1021
R-squared	0.12	0.09	0.10	0.09
MR magnitude	-7.49	-6.73	-4.75	-4.23

**Table IA.XIII:** Accruals and Discretionary Accruals with Difference-in-Differences Approach for US Firms.

**Explanation**: All regressions use difference-in-differences estimation technique. Estimations (1) and (2) use the 2001, 2002 and 2004 observations of US incorporated companies that had public float between \$50 and \$100 million in 2004. It does not use the 2003 data to account for rule anticipation. Estimations (3) and (4) use the 2001, 2002, 2003 and 2004 observations for the same sample. The dependent variables are *Accruals* (estimations (1) and (3)) and *Discretionary Accruals* (estimations (2) and (4)). *MR x 2004* is a dummy variable equal to 1 in 2004 if the company filed an MR in 2004 and 0 otherwise; *MR* is a dummy variable equal to 1 for all years for companies that filed an MR in 2004; see Table IA.II for variables definition; *Market Size of Equity* is in billions. The regressions include (but are not reported here) a constant term. Industry fixed effects are based on the Fama-French 12 sector definitions. Robust t-statistics reported in brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 1%, respectively.

Table IA.XIV: Accruals and Discretionary Accruals In 2003 and 2002.

Sample			Different	Sample				Cor	istant 200	04 Sampl	e	
Estimation	(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	(6)	(10)	(11)	(12)
Dependent Variable	TA	DTA	TA	DTA	TA	DTA	TA	DTA	TA	DTA	TA	DTA
Year	2004	2004	2003	2003	2002	2002	2004	2004	2003	2003	2002	2002
MR in 2004 or ACC in 2002 and 2003	-0.034*	-0.039**	-0.026	-0.026	0.037*	0.020	-0.034*	-0.039**	-0.014	-0.014	0.017	0.005
	[-1.97]	[-2.23]	[-1.54]	[-1.63]	[1.89]	[1.17]	[-1.97]	[-2.23]	[-0.83]	[-0.77]	[06.0]	[0.27]
Lagged Market Size of Equity	-0.191	-0.202	-0.105	-0.173	-0.095*	-0.135**	-0.191	-0.202	-0.130	-0.222	-0.137*	$-0.191^{**}$
	[-1.58]	[-1.60]	[69.0-]	[-1.19]	[-1.85]	[-2.47]	[-1.58]	[-1.60]	[-0.61]	[-1.04]	[-1.87]	[-2.57]
Cash Flow from Operations	-0.044	-0.069	0.003	0.009	-0.109	-0.076	-0.044	-0.069	-0.015	-0.013	0.073	0.083
	[-0.68]	[-1.06]	[0.04]	[0.16]	[-1.32]	[96.0-]	[-0.68]	[-1.06]	[-0.17]	[-0.16]	[0.46]	[0.61]
Change in Net Income	0.229***	$0.219^{***}$	$0.163^{***}$	$0.141^{**}$	-0.010	-0.023	$0.229^{***}$	$0.219^{***}$	0.108	0.121	0.039	0.044
	[3.22]	[3.22]	[2.60]	[2.30]	[-0.53]	[-1.36]	[3.22]	[3.22]	[1.33]	[1.46]	[0.67]	[0.73]
Negative Cash Flow	0.008	-0.016	0.016	0.007	-0.043	-0.048	0.008	-0.016	0.042	0.033	0.014	0.010
	[0.36]	[-0.66]	[0.57]	[0.26]	[-1.51]	[-1.62]	[0.36]	[-0.66]	[1.50]	[1.10]	[0.41]	[0.31]
Book to Market	0.057***	$0.044^{**}$	$0.046^{***}$	$0.026^{*}$	0.000	0.001	$0.057^{***}$	$0.044^{**}$	$0.034^{*}$	0.019	0.016	0.009
	[2.80]	[2.25]	[2.85]	[1.73]	[0.08]	[0.17]	[2.80]	[2.25]	[1.85]	[1.03]	[1.21]	[0.75]
Big Auditor	0.001	0.015	0.034	0.035	0.048	0.050	0.001	0.015	-0.002	-0.003	0.021	0.015
	[0.03]	[0.77]	[1.12]	[1.08]	[1.49]	[1.46]	[0.03]	[0.77]	[90.0-]	[-0.11]	[0.55]	[0.44]
Public Float Terms	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Observations	251	251	270	270	161	161	251	251	240	240	231	231
R-squared	0.28	0.27	0.11	0.09	0.10	0.15	0.28	0.27	0.12	0.14	0.05	0.05
							·	·	r		·	·

Explanation: All regressions use OLS estimation technique. The Different Sample (estimations (1) to (6)) panel repeats the 2004 estimation in coefficient from the 2004 MR dummy in 2002, 2003 and 2004. The dependent variables are Total Accruals(TA) and Discretionary Total Accruals 2003 and 2002, focusing on the sample of firms in \$50 to \$100 million band for the respective years. Estimations (1) to (6) report the MR in 2004 or ACC in 2002 and 2003 coefficients. This is either the MR variable for 2004 or the accelerated filer status (ACC) for years 2002 and 2003. In 2004 all accelerated filers filed an MR. The goal is to test if the accelerated filer status had effect on Accruals and Discretionary Accruals in 2002 and 2003. In 2003 accelerated filers had to report their annual report 15 days earlier. It reports the coefficients of MR filing dummy in 2004. The Estimations (7) to (12) report the MR in 2004 coefficient using the 2004 sample in 2002, 2003 and 2004. The goal is to test if firms that filed MR in year 2004 had significantly different Accruals and Discretionary Accruals from non-filers in 2002 and 2003. Regressions (7) to (12) report the (DTA), defined in appendix C. MR is a dummy variable equal to 1 if the company filed an MR in 2004; see Table IA.II for variables definition; Market Size of Equity is in billions. The regressions include (but are not reported here) a constant term and linear, quadratic, and cubic terms of Public Float. Industry fixed effects are based on the Fama-French 12 sector definitions. Robust t-statistics reported in brackets. \*, \*\*, and \*\*\* Constant 2004 Sample (estimations (7) to (12)) panel repeats the regressions in 2002 and 2003 but using the exact same sample of firms as in 2004. denote two-sided statistical significance at 10%, 5%, and 1%, respectively.

Dependent Variable	Acc	ruals	Discretion	nary Accruals
Estimation Type	(1) OLS	(2) OLS	(3) OLS	(4) OLS
MR in fiscal year 2004	-0.035*	-0.039	-0.039**	-0.051*
	[-1.90]	[-1.37]	[-2.23]	[-1.86]
Cash Flow from Operations 2004	-0.052	-0.068	-0.069	-0.069
	[-0.81]	[-0.95]	[-1.06]	[-0.95]
Change in Net Income 2004	0.213***	0.218***	0.219***	0.218***
	[3.00]	[2.87]	[3.22]	[3.07]
Negative Cash Flow 2004	0.009	0.005	-0.016	-0.023
	[0.41]	[0.19]	[-0.66]	[-0.89]
Book to Market 2004	0.043**	0.046**	0.044**	0.046**
	[2.02]	[2.00]	[2.25]	[2.15]
Big Auditor 2004	-0.006	0.003	0.015	0.027
	[-0.35]	[0.14]	[0.77]	[1.17]
Market Size of Equity 2003	-0.189	-0.198	-0.202	-0.226
	[-1.59]	[-1.41]	[-1.60]	[-1.51]
Public Float Terms	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	No	No
R-squared	0.34	0.35	0.27	0.28
MR magnitude	-4.98	-5.56	-5.46	-7.17

Table IA.XV: Accruals and Discretionary Accruals in 2004 Excluding Potential Rule Evaders.

**Explanation**: All regressions use OLS estimation technique. The sample in estimation (1) covers all companies that had public float between \$50 and \$100 million in 2004. The sample in estimation (2) does not use firms that potentially evaded compliance with the rule. These are the firms that were non-accelerated filers in 2003 and reported public float just under the \$75 million rule in 2004 (with public float in 2004 between \$65 to \$75 million). The dependent variables are *Total Accruals(TA)* and *Discretionary Total Accruals (DTA)*, defined in appendix C. *MR* is a dummy variable equal to 1 if the company filed an MR in 2004; see Table IA.II for variables definition; *Market Size of Equity* is in billions. The regressions include (but are not reported here) a constant term and linear, quadratic, and cubic terms of *Public Float*. Industry fixed effects are based on the Fama-French 12 sector definitions. Robust t-statistics reported in brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 1%, respectively.



Figure IA.3: Comparing S&P 500 returns to MR filers and non-filers returns.

**Explanation**: The graph shows the cumulative 3 day unadjusted returns around events 2 and 3 in table IV. Event 2 was the WSJ announcement that SEC will sets new rule aimed at companies' internal controls published on 5/28/2003, and event 3 was the actual SEC ruling published on 6/5/2003. The graph shows the 5 day raw returns for the S&P 500, for MR Filers (the equal-weighted portfolio that buys all companies that filed managements report and were in a \$50 to \$100 million band in 2004), and. non Filers (the equal-weighted portfolio that sells all companies that did not file managements report and were in the same band).
#	Event Date	Event Description [Expected Effect]	Ϋ́	A filers	ll -ou	AA	AA mii	No-AA
			Hypot.	Actual	Hypot.	Actual	Hypot.	Actual
(1)	5/28/2003	SEC Press Release No. 2003-66 & WSJ article: "SEC Sets a New Rule	+	0.35%	+	0.59%	<mark>-</mark> /+	-0.24%
		Aimed at Companies' Internal Controls" [setting the deadlines, market expected earlier deadline]		[0.32]		[0.40]		[-0.16]
(2)	6/5/2003	SEC Final Rule No. 33-8238: Rule giving one year delay of Section 404	+	1.74%	+	1.20%	-/+	0.54%
		compliance for accelerated filers and 2 years for non-accelerated filers. [setting the deadlines, market expected earlier deadline]		$[1.66]^{*}$		[0.82]		[0.39]
(3)	5/16/2006	SEC Press Release No. 2006-75 & WSJ article: SEC Won't Exempt Small	I	-2.44%		-1.00%	I	-1.43%
		Firms From Controls Rules. [SEC signals resolution to continue the implementation of Section 404]		[-3.04]***		[-1.39]		[-1.86]*
(4)	11/10/2006	SEC Press Release No. 2006-172 & WSJ article: Business Wins Its Battle to	+	-0.05%	+	1.57%	I	-1.62%
		Ease A Costly Sarbanes-Oxley Rule [SEC promises guidences that save money]		[-0.05]		[1.54]		[-2.22]**

Table IA.XVI: Event Study Estimations For Foreign Firms.

Explanation: The Hypot. columns report the expected market responses based on the hypothesis that delays in Section 404 compliance increase market value and news of SEC determination to enforce the rule decrease market valuation (+denotes expected positive reaction, -expected negative reaction, none denotes no expected effect and +/- denotes unclear expected sign). AA filers refers to the equal-weighted portfolio that ouys all foreign companies that filed managements report and auditor's attestation in 2006 and had market size between \$175 and \$5,600 million in 2005. no-AA refers to the equal-weighted portfolio that buys all foreign companies that filed managements report, but did not file auditor's attestation in 2006 and had market size between \$175 and \$5,600 million in 2005. AA minus no-AA refers to the long-short portfolio. The estimations use a 120 day estimation window immediately before the event window. I estimate the market model:  $R_{it} = \alpha_i + \beta_{i1} \cdot MKTRF_t +$  $\beta_{i2} \cdot \text{SMB}_t + \beta_{i3} \cdot \text{HML}_t + \beta_{i4} \cdot \text{UMD}_t + \epsilon_{it}, \ E(\epsilon_{it}) = 0, \ \text{var}(\epsilon_{it}) = \sigma_{\epsilon}^2, \text{ for the 120 day estimation window immediately before the three}$ pook-to-market and momentum factors. I use the predicted normal portfolio returns for the event window to calculate cumulative abnormal returns. For large estimation windows, the cumulative abnormal returns are distributed normally with expected value of 0 and variance of  $3 \cdot \sigma_2^2$  (MacKinley day event window, where  $R_{it}$  is the portfolio return and MKTRF<sub>t</sub>, SMB<sub>t</sub>, HML<sub>t</sub>, and UMD<sub>t</sub> are the return on the market, the Fama-French size, (1997)). Two sided z-stats reported in square brackets. \*, \*\*, and \*\*\* denote two-sided statistical significance at 10%, 5%, and 1%, respectively.