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An exploration of the choice to comply voluntarily with SOX section 404(b)

Alan Blankley
Samford University, Birmingham, Alabama, USA
David Hurtt
Accounting and Business Law, Baylor University, Waco, Texas, USA, and
Jason MacGregor
Baylor University, Waco, Texas, USA

Received 1 October 2018
Revised 17 May 2019
Accepted 29 May 2019

Abstract

Purpose – Central to the Sarbanes–Oxley Act was a requirement that every company have an audit of its internal control over financial reporting. However, there were concerns that this requirement was overly burdensome, from a financial perspective, for small businesses. This concern promoted several delays in enforcing the law for small companies and ultimately caused congress to permanently exempt small businesses. Yet, there are some small companies that voluntarily elect to comply with the law. The purpose of this paper is to explore why these companies elect to incur these costly audits.

Design/methodology/approach – Using a sample of 5,834 non-accelerator US firms, this paper uses a robust logistic regression model to examine why some firms comply voluntary with SOX Section 404(b).

Findings – This study shows that small companies getting audits of internal controls may be doing so to restore investor confidence after reporting failures, to appear credible prior to raising funds, as a response to organizational changes, or in anticipation of being required to comply.

Practical implications – This study provides regulators with an improved understanding of when it is necessary to implement mandatory rather than voluntary guidance.

Originality/value – This study is the first to document why a client would voluntarily comply with SOX Section 404 (b).

Keywords Voluntary disclosure, Non-accelerated filers, Signaling, Audits of internal control systems

Paper type Research paper

Introduction

In 2010, the Dodd–Frank Act permanently exempted smaller public companies from compliance with Section 404(b) of the Sarbanes–Oxley Act (SOX) of 2002. In doing so, Dodd–Frank institutionalized a new category of filer – a filer that is neither an "accelerated filer" nor a "large, accelerated filer." These "non-accelerated" filers (NAFs), defined as firms having public float (equity not held by management or large shareholders) of \$75m or less, are subject to SOX Section 404(a), which requires managers of all public companies to evaluate and report to shareholders on their internal control over financial reporting. As a result of Dodd–Frank, however, they are not subject to SOX 404(b), the requirement to obtain an *audit* of internal control over financial reporting. Only accelerated filers and large, accelerated filers (i.e. firms having public float greater than \$75m) are required to have internal control audits.

Managerial Auditing Journal
Vol. 35 No. 1, 2020
pp. 93-110
© Emerald Publishing Limited
0268-6902
DOI 10.1108/MAJ-10-2018-2023

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Ultimately, NAFs were excluded from the Section 404(b) requirement because of a long-standing concern among both regulators and small businesses that the costs of compliance were especially burdensome for small businesses, with the cost of compliance outweighing the benefits. Because of this concern, the Securities and Exchange Commission (SEC) extended the Section 404 compliance date for NAFs seven times after the enactment of SOX, largely out of concern for the cost burden and uncertain benefits accruing to small firms[1]. Congress itself was concerned about the compliance burden on smaller firms as well. Not only did Dodd–Frank exempt NAFs entirely, but it also directed the SEC to study the compliance burden on companies with market caps between $75m and $250m, with particular attention to investigating whether methods of reducing the burden of compliance or outright exemption might encourage these companies to list on US exchanges in their initial public offerings (Dodd–Frank §989 G)[2].

Recent research also indicates a substantial cost burden on smaller companies (Zhang, 2007). Iliev (2010), for example, finds that in 2004, firms just over the public float cutoff of $75m that had to comply with Section 404(b), saw their audit fees increase by 98 per cent[3]. This study's estimate of the incremental cost associated with voluntary 404(b) compliance by NAF firms is consistent with Iliev's finding. We find that for the average NAF firm complying voluntarily with Section 404(b), audit fees increased by 39 per cent from the year before its first 404(b) opinion audit to the year of its first audit[4]. Even now, after more than a decade of experience, as well as the release of Auditing Standard No. 5 (PCAOB 2007) and the SEC's Interpretive Guidance (SEC, 2007), a substantial cost burden appears to persist for small companies complying with SOX 404(b).

Evidence on the benefits associated with SOX Section 404(b) is mixed, but tends to suggest that smaller firms do not benefit to the extent larger firms might. Many prominent organizations argue that the benefits of compliance outweigh the costs. The American Institute of Certified Public Accountants (AICPA), for example, has argued against exemption for any publicly traded firm, regardless of size, claiming that Section 404(b) leads to improved financial reporting and greater transparency (AICPA 2012). Likewise, in a letter to the Chair of the House Financial Services Committee, the executive director of the *Center for Audit Quality* argued that the benefits of an internal control audit "far outweigh" the costs by protecting investors, promoting confidence in capital markets and improving capital formation (Fornelli and Mahoney, 2011). Fornelli cited testimony by Mary Schapiro, former Chair of the SEC, who claimed that the SEC heard repeatedly from investors that they have more confidence in financial reporting when a firm has had an internal control audit. Wagner and Dittmar (2006) also suggest that compliance can help strengthen the control environment, standardize processes, reduce complexity and generate other administrative efficiencies. More importantly, Alexander *et al.* (2013) claim that the vast majority of corporate insider survey respondents perceive at least some benefits to Section 404; results of their survey of corporate insiders suggest that respondents believe benefits include improvement to the company's information environment and internal control structure, the audit committee's confidence in internal control structure, improved financial reporting and the firm's ability to detect and prevent fraud. The authors also note, however, that these benefits vary by size and complexity; larger, more complex firms tend to benefit more than smaller firms, suggesting there is a large, fixed-cost component to compliance. Most respondents, though, especially those from smaller firms, believe the benefits do not outweigh the costs.

Based on his finding that buy and hold returns of firms having an internal control audit were 17 per cent lower than those of firms not having an audit, Iliev (2010) also concluded that the benefits of compliance failed to exceed the cost. However, Cassell *et al.* (2013)

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examined the impact of voluntary compliance with SOX 404(b) on the cost of capital for NAF firms, and found that voluntary compliance is associated with significant reductions in both the cost of equity and the cost of debt.

Given the cost burden compliance imposes on small firms (Zhang, 2007; SEC, 2009; Iliev, 2010), the uncertain benefits accruing to small firms (Iliev, 2010), and the widespread perception that costs of compliance outweigh the benefits (Alexander *et al.*, 2013), it is interesting to consider why small firms – who are permanently exempted from Section 404 (b) – would comply voluntarily. Cassell *et al.*'s (2013) finding suggests that NAF firms might voluntarily comply to lower their cost of capital. This paper investigates alternative motivations for compliance. Clearly, the fact that a small subset of NAF firms voluntarily complies suggests that managers of these firms perceive some benefit that outweighs the incremental costs of compliance.

The fundamental question remains: under what circumstances would managers of a small firm perceive that an audit of its internal controls creates enough value to justify the cost? In addition, what is the nature of the value-added benefit provided by the audit? We find evidence consistent with Lennox and Pittman (2011) that voluntarily obtaining an audit sends a signal to stakeholders of financial reporting credibility and managerial competence. This study considers four scenarios where companies may uniquely benefit from having an opinion on internal controls.

First, managers may seek a Section 404(b) opinion to restore trust after a previous reporting failure. A prior reporting failure may damage the firm's reputation, generate labor market penalties for managers and directors or increase the cost of capital (Srinivasan, 2004). After a reporting failure, managers may wish to obtain an audit of internal controls to mitigate such effects and signal to the marketplace that management has taken steps to correct the issues leading to the failure.

Second, a firm seeking financing in the immediate future may seek a 404(b) audit opinion to signal reporting credibility to providers of capital. Validation of the firm's internal controls may provide investors greater confidence in the firm's financial statements and could serve to differentiate the firm from other similarly situated firms, ultimately improving the firm's ability to raise capital.

Third, significant organizational change related to new executive committee or board members may prompt the decision to get a 404(b) opinion. NAF firms may seek an opinion to validate that the change in leadership did not disrupt the firm's internal reporting environment or impair its ability to produce reliable financial information. New leadership may bring a new reporting philosophy to the firm or the new leadership may believe that voluntarily seeking a 404(b) opinion signals their managerial competence, potentially generating confidence in stakeholders that the new leadership takes its financial reporting obligations seriously.

Finally, firms may voluntarily comply with Section 404(b) requirements because they anticipate being required to comply in the near future. Growing firms that anticipate having public float greater than $75 m in the near future may adopt the regulation early to facilitate the transition from NAF to accelerated filer. In this case, the company may elect to get an opinion prior to the mandate to signal both their readiness for the transition as well as to provide management with confidence that they will avoid having a material weakness surprise following the transition.

Using a sample of NAFs from 2008 to 2012, this study examines which factors are associated with the decision to get a SOX 404 opinion for the first time. We find, when using the receipt of a comment letter or issuing a restatement as indications of reporting failure, support for the notion that firms voluntarily comply with Section 404(b) to restore trust after

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a reporting failure. Interestingly, when using management issuance of a 302 material weakness as the reporting failure, we do not find evidence of increased voluntary compliance. In addition, voluntary opinions are strongly associated with firms seeking capital. We find evidence of an association between changes in the makeup of the audit committee and the decision to procure an audit of internal controls, but we do not find evidence of this association with changes in the CEO or CFO. There is also a strong association between voluntarily auditing internal controls and being close to the threshold for future mandatory compliance[5].

This study makes two important contributions to the auditing literature. First, NAFs voluntarily chose to incur a costly audit of internal controls over financial reporting. By definition, this group of firms perceives benefits greater than the cost, while other NAFs, Congress, regulators and corporate insiders (Alexander *et al.*, 2013) believe that the costs outweigh the benefits for small firms. This disparity has not been explained. This study documents that there are multiple reasons related to endogenous circumstances that may explain why these firms seek an internal control audit. Second, this study suggests that a desire to signal financial reporting competence and reliability across these endogenous circumstances may be a key underlying motivation driving voluntary compliance.

The following sections review the literature, present an exploratory model, discuss the sample and methodology and finally discuss the results and the implications.

Literature review

Audits of non-accelerated filers

While there is extensive research on accelerated filers, there has been limited research focused on NAFs (Cassell *et al.*, 2013; Munsif *et al.*, 2013; Bedard *et al.*, 2008; Holder *et al.*, 2013). Most of the research that looked at NAFs compared small-accelerated filers with NAFs, rather than focusing on the audits of NAFs. NAFs represent a unique audit segment worthy of further examination.

The audit market for NAF companies is not only large but diverse. Analysis of companies included in the *Audit Analytics* database indicates that in 2017, large accelerated and accelerated filers represented only 29.5 per cent of the all public audit clients. The non-accelerated audit market accounted for 23.9 per cent of the total audit fees paid by all public companies. Since 2008, non-Big 4 audit firms have earned more audit fees annually from NAFs than from accelerated filers. While the Big 4 audit the majority of non-accelerated companies, their market dominance is much lower than its dominance among accelerated filers. From 2008 to 2012, among accelerated filers, Big 4 firms have audited over 80 per cent of all companies while earning over 95 per cent of all audit fees paid. Among non-accelerated companies, the Big 4 firms audit only 45 per cent of the companies while earning 80 per cent of the audit fees[6].

Voluntary compliance

One of the central objectives of the Sarbanes–Oxley Act of 2002 was to create uniformity in best practices. For example, all public corporations are now required to have audit committees that are entirely independent and which include a financial expert. This homogeneity in audit committees makes it difficult for investors to identify companies with relatively strong or weak governance from public disclosures. Similarly, the requirements over internal controls make it challenging for accelerated filers to signal higher quality internal control systems. However, since NAFs are not required to comply with Section 404 (b), it is possible for these companies to signal higher quality financial reporting by voluntarily procuring an audit of their internal control systems.

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While companies have the option to comply voluntarily with SOX 404(b), most NAF firms are hesitant to exercise this option given its high cost and indeterminate benefits. The SEC's decision to delay the requirement for NAFs to obtain SOX 404(b) audits for nearly seven years suggests that the cost of compliance for small companies has been a long-standing concern to regulators. Some contend that high costs have caused some public companies to delist and some companies to consider listing in other countries to make their initial public offerings outside of US capital markets (Carney, 2006). As the directives in Dodd–Frank §989 G suggest, this was also a direct concern of lawmakers. Krishnan *et al.* (2008) document that the average total cost to comply with SOX 404 was over $2m for their sample of firms. Ghosh and Pawlewicz (2009) report an increase of over 70 per cent in companies' audit fees following SOX 404(b) implementation. Kinney and Shepardson (2011) conclude that not only is the cost of complying with the SOX 404(b) requirement for small firms very high (they report that in 2004, audit fees more than doubled and remained high), but that for these firms, management internal control reports and traditional financial audits may be more cost-effective disclosures.

While the high costs of SOX 404(b) compliance are undisputed, the benefits of compliance, especially for small firms, are not clear. Many of the claimed benefits are broad and difficult to document empirically. For example, two principal objectives of SOX – to restore investor confidence and improve audit quality – are often claimed as benefits of the law (Ernst and Young, 2012) but such benefits are realized most fully at the macro level (in the marketplace) and less fully at the micro (complying firm) level. Rice and Weber (2012) present evidence that indicates SOX 404 may not be effective at preventing material misstatements. Cutler (2006) suggests that because small firms are less complex and more transparent, SOX 404 is unnecessary. Small firms themselves fail to perceive benefits greater than costs (Alexander *et al.*, 2013). Even so, some small companies choose to receive a 404 opinion.

Given the lack of prior literature on NAFs and internal control choices, the focus of this paper is on a single research question:

RQ. Why do small, non-accelerated filing companies comply voluntarily with SOX 404 (b)?

An exploratory model

For parsimony, this study uses a simple exploratory model to consider some of the different motivations a company may have for voluntarily receiving a 404(b) opinion. The dependent variable in this model is the decision by a NAF to receive an internal control audit for the first time. This study focuses on first-time adopters because the decision to begin receiving a 404(b) audit may be different than the decision either to continue, or to discontinue, 404(b) audits. This study explores whether or not a NAFs decision to voluntarily purchase a 404(b) audit is associated with an effort by management to signal competence and credibility when these firms face any of four unrelated economic circumstances. In other words, management's decision to obtain a 404(b) opinion is a function of its desire to signal competence and credibility when the firm has had a past reporting failure; when it seeks a major, future capital infusion; when there has been an organizational change related to leadership and when it anticipates mandatory compliance in the near future. Equation (1) below identifies the functional relationships:

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$$OPIN404 = f(RESTORE, BUILD, RESPOND, ANTICIPATE) \quad (1)$$

The paper next develops the rationale for each association.

Restore trust after reporting failures

As indicated in the sub-title to the Sarbanes–Oxley Act of 2002, the purpose of SOX is to restore trust following the reporting scandals that marred the financial markets at the turn of the century. Arguably, no single section of SOX more closely relates to this objective than Section 404. It specifically directs the auditors' attention to the underlying financial reporting processes. Presumably, if the reporting systems are reliable then the information generated by these systems should also be trustworthy. Consistent with this assumption, research has found that an absence of an audit of internal controls is associated with lower revenue and lower earnings quality (Krishnan and Yu, 2012). It is possible that NAFs may elect to comply with Section 404 to restore trust when investors have had cause to doubt management.

Enhance credibility before seeking capital

A company may seek to improve their reputation, not to minimize the impact of a failure, but in anticipation of needing to be viewed as credible. The SEC expected that internal control audits would improve "investor confidence in the reliability of a company's financial disclosure and system of internal control over financial reporting" (SEC 2003). Since research suggests that smaller firms are more likely to have weaker internal controls (Doyle *et al.*, 2007; Ogneva *et al.*, 2007), firms with stronger controls may have incentives to demonstrate that their controls are reliable. Investors may value evidence that the firm's controls are reliable because reliable controls reduce the opportunities for accounting fraud or errors and can enhance earnings quality (Chan *et al.*, 2008). In 2006, the PCAOB asserted that the first two years of reporting on internal control had yielded benefits to investors, who "have found public company financial reporting to be of higher quality and enhanced transparency" (PCAOB 2006). Chen *et al.* (2013) find that auditor attestation under SOX 404 (b) increases the information content of earnings. Consistent with the 404(b) exemption being detrimental for financial reporting, Holder *et al.* (2013) report that NAFs have experienced a decrease in earnings quality because of the passage of SOX.

Agency theory suggests that when a company expects to raise capital, it has increased incentives to validate its internal control system. Some have speculated that the lack of an internal control audit for NAFs could make it more costly to raise capital because of the higher risk to their financial reporting quality (Ashbaugh-Skaife *et al.*, 2009; Gupta *et al.*, 2013). Numerous studies have found a relationship between internal control strength and the cost of capital (Ogneva *et al.*, 2007; Beneish *et al.*, 2008; Ashbaugh-Skaife *et al.*, 2009; Costello and Wittenberg-Moerman, 2011). If the internal control mandate provides a discipline for effective financial stewardship (Hermanson and Ye, 2009), then firms obtaining an audit of internal controls should see a lower cost of capital (Donaldson, 2006). Cassell *et al.* (2013) provided evidence that voluntarily having an internal control audit does, in fact, lower the cost of capital for NAF firms.

While the absence of a 404 opinion does not indicate that the controls are ineffective, the presence of an unqualified internal control opinion does indicate they are effective, signaling additional credibility relative to the unaudited firm. This suggests that companies with strong internal controls seeking additional capital may opt to provide a signal to the market that their controls are reliable and ultimately increase capital providers' confidence in the quality of their financial reports.

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Respond to organizational change

Significant internal events creating uncertainty about the firm's business or strategy that have some bearing on financial reporting may trigger the desire to signal that the systems and processes surrounding financial reporting are unaffected by the change. Changes to the board of directors or to the executive committee may create such uncertainty. New leaders may, for example, be motivated to signal that during their tenure, the firm's reporting credibility will remain strong or be enhanced.

While management has no direct role in determining what audit services the company purchases, management still plays a critical role in the financial reporting process, and they still have considerable influence over the audit. When there is an executive change, there may be a new perspective on the need for a 404(b) audit, and the new executive may persuasively argue to the board that a 404(b) audit is necessary. For example, the new executive may seek external validation of the internal control system and may use the 404(b) audit to identify internal control weaknesses that need to be remedied. In addition, a new CEO or CFO may, out of caution or prudence, seek a 404(b) opinion to provide evidence to support their certification of the financial statements under Section 302.

It is the responsibility of the audit committee to determine what audit services to purchase from the audit firm. This would include the decision to expand the scope of the audit. With a change in the audit committee composition, the committee may change its evaluation of the need and usefulness of the 404(b) opinion. The new member may have seen the benefits of a 404(b) audit while serving on another audit committee or the new member may have greater litigation concerns or the new board member may argue that a 404(b) audit will enhance the perceived quality of the firm's reported earnings. Goh and Li (2011), for example, find that companies with strong internal controls have relatively more conservative earnings.

Anticipate statutory requirement

While NAFs are not required to complete an audit of the internal controls over financial reporting, this discretion exists only so long as the company maintains its relatively low market capitalization. A company approaching the accelerated filer status may elect to comply with the standard before it becomes mandatory. There are several justifications for this decision. First, the company may believe it is worthwhile to address any weaknesses in internal control before they are required to disclose them. Presumably, if a company is not required to procure an audit of internal controls, then it would not be required to disclose any problems discovered. Second, the company may have contracted with the auditor to provide the service in anticipation of becoming an accelerated filer. Third, the company may believe that improving the internal controls may actually facilitate the growth necessary to become an accelerated filer. Hence, the company receives the audit to improve the controls, which ultimately contributes to the company becoming an accelerated filer.

Model and sample

This study uses a robust cluster logistic regression model to estimate the likelihood of a NAF receiving a SOX 404(b) opinion on internal controls for the first time based on motivations defined in the prior section. The fully specified model is as follows:

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$$OPIN404 = \beta_0 + \beta_1 MW302 + \beta_2 SECCL + \beta_3 RESANN + \beta_4 NEWCAPITAL + \beta_5 AUDITCOMMITTEE + \beta_6 EXECUTIVE + \beta_7 MARKETCAP + \beta_8 SIZE + \beta_9 REVGROW + \beta_{10} DA + \beta_{11} GCOPIN + \beta_{12} LOSS + \beta_{13} LNTENURE + \beta_{14} BUSYFYE + \beta_{15} BIG4 + \varepsilon \quad (1)$$

The dependent variable, *OPIN*404, equals 1 if the company's auditor issued an opinion on the effectiveness of internal controls for the first time, and zero otherwise. For a complete specification of the independent variables, please see the Appendix.

To explore whether corporations voluntarily pursue a 404(b) opinion to restore trust following a reporting failure, this paper considers three reporting failures: material weakness in financial reporting controls, comment letters and restatements. If management were to disclose a material weakness in disclosure controls under SOX Section 302, then this may undermine confidence in their financial reporting system. This concern would be consistent with Myllymaki (2014) who finds that companies reporting internal control problems are more likely to have future restatements than those that do not. If investors do not trust the reporting system, then this may affect their perceptions of management and cause them to discount management's reports. In periods after reporting a Section 302 material weakness, management may seek to signal that the integrity of the firm's financial reporting system is now trustworthy. The clearest and most efficient way to do this may be to purchase an independent audit of their internal control over financial reporting. The model includes *MW*302 which equals 1 if management disclosed a Section 302 material weakness problem during the prior year, and 0 otherwise.

Of course, investors and other stakeholders may look to other indicators to evaluate the effectiveness of the company's controls as well. SOX Section 408 requires that at least once every three years the SEC review a company's corporate filings. If the SEC discovers deficiencies in the filings or identifies areas of financial reporting that lack clarity, then the SEC will send a comment letter to the company delineating their concerns. The company is then required to work with the SEC to rectify these concerns. At the completion of the comment letter process, the SEC releases the letters to the public. Researchers consider these comment letters as evidence of low reporting quality (Hribar *et al.*, 2014) and find some evidence that companies institute changes to improve reporting quality (Robinson *et al.*, 2011) in response. Baldwin *et al.* (2015) find that companies may even replace their auditors following the receipt of a comment letter. If the board of directors believes that receipt of a comment letter is a severe enough event to warrant an auditor change, then they may also consider other, less drastic remedies to prevent future reporting problems. One potential remedy would be to obtain an audit of the internal controls. If the board desires to signal to the market that management's reports are reliable and help restore trust that may have been eroded by the comment letter, then they may seek external validation through a SOX 404(b) audit opinion. The variable *SECCL* equals 1 if the company received a comment letter from the SEC during the prior year, and 0 otherwise.

A restatement is a public acknowledgement that previously released financial statements contained a material misstatement. A restatement also suggests that the underlying internal controls are flawed. Because the stock market tends to view companies that have restatements negatively, the board may pursue strategies to minimize the negative impact of the restatement. Prior research has found that such strategies include terminating executives or replacing the auditor (Srinivasan, 2004). The board may elect to provide a more direct signal that the financial reporting controls can be relied upon by obtaining a

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SOX 404(b) audit opinion. *RESANN* equals 1 if the company announced a restatement that reduces net income in the prior year, and 0 otherwise.

To consider whether companies elect to receive a 404(b) opinion to appear credible prior to an effort to raise capital, this model includes the variable *NEWCAPITAL*. This variable equals 1 if the company will issue any new equity or debt that exceeds 20 per cent of total assets in the coming year, and 0 otherwise. This study only considers major debt or equity issuances because these material capital issuances are more likely to be anticipated in advance; therefore, they would be more likely to benefit from a 404(b) audit.

To explore whether organizational changes influence the decision to receive an opinion on internal controls, the model includes two variables. First, *AUDITCOMMITTEE* equals 1 if the company makes any changes to its audit committee composition in the year. Second, *EXECUTIVE* equals 1 if the company changes its CEO or CFO in the current year, and 0 otherwise.

To explore whether firms purse an internal control opinion because they anticipate being compelled to comply with Section 404(b) in the near future, the model includes *MARKETCAP*. *MARKETCAP* equals 1 if the current market capitalization divided by seventy-five million exceeds 0.75. This would indicate that the company's size lies within 25 per cent of the dollar threshold where internal control opinions will become mandatory.

The model includes several additional controls. *SIZE* is calculated as the natural logarithm of total assets. Larger companies may have more developed systems of internal controls, which could lower the cost of compliance. This is consistent with Carcello *et al.* (2005) and Anderson *et al.* (2012) who found that company size positively influences the size of the internal auditing departments. Growth may also influence a manager's decision to seek a 404(b) audit. We include *REVGROW* to control for this influence. *REVGROW* equals 1 if the client's current year revenue exceeds that of the prior year, and 0 otherwise. Because these firms are small by definition, managers of high-growth firms within this population may believe that the market does not demand assurance over internal controls; however, because these firms are growing, managers of high-growth firms may wish to prepare for the internal control reporting mandate in anticipation that their companies will soon become accelerated filers. We include three measures of client financial health because clients in financial distress may lack the resources to invest in a costly voluntary audit opinion. First, we include *DA*, which is the ratio of total debt to total assets. Second, we include *GCOPIN*, which equals 1 if the client received a going concern opinion in the preceding year and 0 otherwise. We also include *LOSS*, which equals 1 if the company has negative earnings. While some firms in financial distress may lack the resources to purchase a 404 opinion, others may specifically seek a 404 opinion to help secure additional funding by adding credibility to the financial statements.

We include other variables to capture the auditor-client relationship. We included *LNTENURE*, calculated as the natural logarithm of the number of consecutive years the auditor has served the client. We expect that when a new auditor is engaged, the auditor will be less familiar with the client and the client's processes, making it more costly to receive a 404 opinion. However, it is possible that part of the motivation to switch auditors was to retain the services of an auditor that had more experience with 404 audits in anticipation of engaging the new auditor for that purpose, at least in part.

We also include *BUSYFYE*, which equals 1 if the client has a fiscal year-end ending in the period beginning one week prior to December 31 and ending one week following December 31, and 0 otherwise. Given audit firm resources are likely more constrained at certain times of the year, they may charge a larger fee premium during busier times of the year. If the client's decision to get a 404 opinion is based on a cost-benefit analysis, the

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client's decision to get a 404 opinion may vary with its fiscal year-end. Finally, *BIG4* equals 1 if the company uses a *BIG4* auditor and 0 otherwise. Because Big 4 auditors have more experience with 404(b) opinions, they may be able to offer the service at a lower cost, thereby making it a more cost-effective option.

Sample

Table I below identifies the sample attrition. The sample selection process begins by identifying all 22,203 firm-years for which a NAF had an audit opinion in *Audit Analytics* from 2008 to 2012. The sample starts in 2008 to ensure that all firms within the sample have management's annual assessment of internal controls. Because certain variable specifications require data on events in the year following the opinion, data is collected until 2013. Next, firms in financial industries are eliminated as they may have different reporting incentives. Next, non-US firms, companies that received audit opinions from multiple auditors, or multiple audit opinions in a single year are eliminated because their incentives may vary dramatically. Firms that have received a 404(b) opinion in the past are eliminated because their motivation for voluntarily receiving a 404(b) opinion may differ. This study contends that the decision to get subsequent 404(b) opinions may be fundamentally different than the decision to get the first opinion. Finally, firms that lack the data necessary to conduct the analysis are removed. This yields a final sample of 5,834 firm-years.

Results

The univariate analysis is reported in Table II. These findings indicate that NAFs that voluntarily procure a 404(b) opinion seem to be different from those that do not. Contrary to expectations, firms with material weaknesses are less likely to receive a 404(b) opinion. This result suggests that rather than a 302 material weakness creating incentives to validate the effectiveness of controls, it may indicate that a company is unlikely to receive a clean 404(b) opinion. Companies may be unwilling to pay for external validation that their controls are ineffective. However, univariate results indicate that SEC comment letters are significantly associated with voluntary compliance, but restatements are not.

With respect to the notion that significant future capital raising events may motivate a voluntary 404(b) audit, the univariate results indicate that future debt or equity issues are associated with voluntary compliance. This result is consistent with firms seeking to signal their credibility to the market. The results do not find that executive changes trigger a 404(b) audit, but they do indicate that changes to the makeup of the audit committee are associated with the decision to obtain a 404(b) opinion. Finally, there is strong evidence that companies approaching the mandatory threshold for compliance are more likely to elect to have a 404 opinion. This result is consistent with the notion that early compliance may help firms prepare to be accelerated filers, and may signal readiness and credibility to the marketplace. Table III reports correlations.

Non-Accelerated Filers in Audit Analytics from 2008 to 2012	22,203
Companies in financial industries	5,847
Non-US companies	964
Multiple opinions on single year	649
Multiple auditors in single year	1,246
Past SOX 404 (b) opinion	617
Missing Compustat data	7,046
Final sample	5,834

Table I.
Sample formulation

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	Full sample		404 opinion		No 404 opinion		Test of differences	
	Mean	SD	Mean	SD	Mean	SD	Diff.	*t*-stat
Panel A: Continuous variables								
SIZE	16.76	2.70	19.53	2.17	16.72	2.69	2.81	10.26
DA	4.35	20.08	0.53	0.33	4.42	20.24	−3.89	1.89
LNTEN	1.83	0.67	1.77	0.60	1.83	0.67	−0.07	0.96
n =	5,834		97		5,737			

Panel B: Binary variables	Full sample	404 opinion	No 404 opinion	Test of diff.		
	Frequency	Frequency	Frequency	Diff.	*t*-stat	*p*-value
MW302	25.0%	13.4%	25.2%	−11.8%	2.66	0.01
SECCL	23.8%	44.3%	23.5%	20.8%	4.77	<0.01
RESANN	6.4%	8.2%	6.4%	1.9%	0.74	0.46
NEW_CAPITAL	53.7%	72.2%	53.3%	18.8%	3.69	<0.01
AUDITCOMMITTEE	11.6%	26.8%	11.3%	15.5%	4.73	<0.01
EXECUTIVE	23.2%	19.6%	23.3%	-3.7%	0.85	0.40
MARKETCAP	14.7%	63.9%	13.9%	50.0%	13.80	<0.01
REVGROW	46.7%	53.6%	46.6%	7.0%	1.37	0.17
GCOPIN	28.4%	4.1%	28.8%	-24.7%	5.35	<0.01
LOSS	61.0%	30.9%	61.5%	-30.6%	6.13	<0.01
BUSYFYE	65.0%	76.3%	64.8%	11.4%	2.34	0.02
BIG4	23.5%	60.8%	22.9%	37.9%	8.73	<0.01
n =	5,834	97	5,737			

Notes: All variables defined in Appendix. All tests are two-tailed

Table II.
Descriptive statistics

Table IV reports the results of the clustered, robust regression model. Results largely confirm the univariate analysis. Consistent with expectations, past SEC comment letters (p-value < 0.01) and restatements (p-value < 0.05) are positively associated with voluntarily receiving a 404(b) opinion. This result suggests that, consistent with SOX's intent, companies are using the provisions of SOX 404(b) to restore trust. This is important because it provides some evidence that 404(b) is effective at restoring trust and that companies themselves perceive it to do so.

Consistent with expectations, firms that will issue debt or equity in the near future are more likely to receive a 404(b) opinion. This result is consistent with companies choosing to receive 404(b) opinions to increase investor confidence in management's reports[7].

Consistent with expectations, audit committee changes are associated with the decision to receive a 404(b) opinion. This could indicate that new audit committee members are more inclined to want a 404(b) opinion. Alternatively, the directors could have added members to improve the governance system in anticipation of the already planned 404(b) audit. However, there is no evidence that executive changes are associated with the decision to procure a 404(b) opinion. In untabulated results, a number of extended time periods for executive transitions are considered but fail to prove significant in the model. Overall, these results are consistent with the notion that new executives may be unwilling to prioritize procuring 404(b) opinions early in their tenure[8].

The significant coefficient on the market capital variable indicates that when a company's market capitalization is approaching the level where an audit of internal controls is mandatory, the firm is more likely to comply voluntarily[9]. As the size of a company increases, the more likely it is to receive a 404(b) opinion. Finally, results also indicate that

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Table III.
Correlation

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1)	*OPIN404*	1.00														
(2)	*MW302*	*−0.03*	1.00													
(3)	*SECCL*	*0.06*	*0.03*	1.00												
(4)	*RESANN*	0.01	*0.17*	0.02	1.00											
(5)	*NEWCAPITAL*	*0.05*	0.00	*0.06*	−0.02	1.00										
(6)	*AUDITCOMMITTEE*	*0.06*	0.01	*0.04*	0.01	*0.08*	1.00									
(7)	*EXECUTIVE*	−0.01	*0.08*	0.02	*0.03*	*0.05*	*0.18*	1.00								
(8)	*MARKETCAP*	*0.18*	*−0.05*	*0.08*	−0.01	*0.17*	*0.04*	−0.02	1.00							
(9)	*SIZE*	*0.13*	*−0.22*	0.00	*−0.04*	*−0.08*	*0.08*	*−0.05*	*0.21*	1.00						
(10)	*REVGROW*	0.02	−0.02	*0.05*	−0.01	*0.10*	0.02	*−0.03*	*0.09*	*0.10*	1.00					
(11)	*DA*	−0.02	*0.13*	0.00	*0.05*	−0.02	*−0.05*	−0.01	*−0.06*	*−0.44*	*−0.10*	1.00				
(12)	*GCOPIN*	*−0.07*	*0.26*	*0.05*	*0.07*	*0.07*	*−0.03*	*0.09*	*−0.15*	*−0.57*	*−0.08*	*0.30*	1.00			
(13)	*LOSS*	*−0.08*	*0.15*	*0.03*	*0.03*	*0.09*	*0.03*	*0.14*	*−0.14*	*−0.46*	*−0.09*	*0.14*	*0.39*	1.00		
(14)	*LNTENURE*	−0.01	*−0.18*	*−0.06*	*−0.07*	*−0.04*	*−0.03*	*−0.09*	*0.04*	*0.27*	0.02	*−0.06*	*−0.21*	*−0.17*	1.00	
(15)	*BUSYFYE*	*0.03*	−0.02	0.02	−0.01	0.01	*0.03*	0.01	0.02	*0.06*	0.00	0.02	*0.05*	*0.06*	−0.01	1.00
(16)	*BIG4*	*0.11*	*−0.18*	−0.01	*−0.05*	*−0.05*	*0.05*	−0.01	*0.14*	*0.53*	−0.02	*−0.10*	*−0.23*	*−0.20*	*0.33*	*0.13*

Notes: Italic indicates significant at the 0.05 level. All variable defined in Appendix

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$$OPIN404 = \beta_0 + \beta_1 MW302 + \beta_2 SECCL + \beta_3 RESANN + \beta_4 NEWCAPITAL + \beta_5 AUDITCOMMITTEE + \beta_6 EXECUTIVE + \beta_7 MARKETCAP + \beta_8 SIZE + \beta_9 REVGROW + \beta_{10} DA + \beta_{11} GCOPIN + \beta_{12} LOSS + \beta_{13} LNTENURE + \beta_{14} BUSYFYE + \beta_{15} BIG4 + \varepsilon$$

	Coef.	z	*p*-value
CONSTANT	−13.93	8.75	<0.01
MW302	−0.34	0.96	0.34
SECCL	0.68	3.01	<0.01
RESANN	0.80	1.97	0.05
NEWCAPITAL	0.81	3.09	<0.01
AUDITCOMMITTEE	0.76	2.82	<0.01
EXECUTIVE	−0.14	0.47	0.64
MARKETCAP	1.70	7.00	<0.01
SIZE	0.43	5.96	<0.01
REVGROW	−0.14	0.54	0.59
DA	−0.58	1.38	0.17
GCOPIN	−0.86	1.44	0.15
LOSS	−0.18	0.69	0.49
LNTENURE	−0.56	3.27	<0.01
BUSYFYE	0.41	1.63	0.11
BIG4	0.50	1.79	0.07
n	5,834		
Pseudo R^2	0.29		
Year controls included			

Notes: All variable defined in Appendix. All tests are two-tailed

Table IV. Robust logistic regression

longer-tenure auditors are associated with a lower likelihood of a company obtaining a voluntary 404(b) opinion, suggesting that firms are more likely to voluntarily seek a 404(b) audit in the early years of their relationship with their auditor.

Conclusion

SOX was a controversial law, and the decision in Dodd–Frank to permanently exempt smaller companies because of cost concerns is also controversial. This paper explores certain economic circumstances that might affect management's perceptions of the relative benefits of compliance with SOX Section 404(b) compared to the cost. Because NAFs having less than $75m in public float are exempt from compliance with Section 404(b), evaluating the choice to comply for these firms results in a natural experiment that allows us to explore the conditions under which an exempt company would voluntarily incur the cost of complying with SOX 404(b) despite the potentially burdensome cost. The study finds that companies make this choice for a variety of reasons. They are more likely to choose to obtain a 404(b) audit after receiving a comment letter from the SEC, suggesting that firms in this position are seeking to restore trust following a reporting failure by re-establishing the credibility of their financial reporting processes. In addition, firms appear to choose a 404(b) audit before seeking significant capital funding, which is consistent with the desire to establish credibility with providers of capital. When firms have significant internal changes

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to their audit committees, the companies appear to voluntarily obtain 404(b) audits, as well as when the company anticipates having to comply with Section 404(b) in the near future.

This research has important implications. First, it provides evidence that some firms seem to benefit from the option of auditing the quality of their reporting system. However, because all NAF firms do not exercise this option, some must perceive the costs of 404(b) compliance as greater than the benefits. This supports the notion that there is an efficient market for audit services. This would also seem to undermine the need for audits of internal control systems to be a mandatory requirement. Second, it provides evidence that managers believe that Section 404(b) opinions enhance their firm's credibility. Third, it finds that audit committee composition does influence the decision to obtain a 404(b) audit. This suggests that even directors new to an audit committee have the potential to immediately influence the reporting environment. A limitation of our study is our decision to exclude financial firms from our sample. Our results should be interpreted in light of this sample restriction.

While this study has explored why a company would voluntarily elect to receive a 404(b) opinion, the research points to several additional issues worthy of further consideration. The results suggest that management perceives that obtaining a 404(b) audit potentially restores trust in the firm's financial reporting, but does it actually do so? Do the cost savings for companies that voluntary receive a 404(b) opinion in anticipation of future financing needs actually cover the cost of obtaining the 404(b) opinion? Finally, do managers of firms that are close to the threshold for mandatory compliance take steps to restrain growth or otherwise fall under the $75m in public float threshold, and if so, why do some similarly situated firms seek to avoid the cost of compliance while others voluntarily assume the cost, as the results suggest?

Notes

1. The SEC extended the compliance dates for NAFs on February 24, 2004, March 25, 2005, September 22, 2005, April 23, 2006, December 15, 2006, June 26, 2008, and October 13, 2009. Ironically, in its October 13, 2009 statement, the SEC stated that they expected no further extensions and that NAFs would be subject to SOX 404(b) requirements beginning for fiscal years ending after June 15, 2010. One month later, the President signed Dodd–Frank into law which permanently exempted NAFs from Section 404(b).
2. In their 2011 study of the compliance burden for firms with public float of $75-250m, the SEC staff concluded that while the "U.S. markets' share of world-wide IPOs raising $75-$250m has declined over the past five years, there is no conclusive evidence from the study linking the requirements of Section 404(b) to IPO activity" (SEC 2011).
3. Iliev (2010) calculated an implied dollar audit fee increase for the mean company that obtained auditor attestation of the firm's internal controls of $698,890.
4. This estimate suggests a lower cost increase associated with compliance than Iliev (2010). This finding may be because this study's sample firms are smaller (all voluntary compliance firms with market caps below $75m); auditors have no doubt improved the efficiency of their internal control audits since the early days after SOX when these were new engagements and which comprises Iliev's time frame; the elimination of fixed start-up costs (Alexander et al. 2013); and the time frame would include the regulatory reforms to SOX 404 introduced jointly by the SEC and PCAOB in 2007, which the SEC claimed were successful in reducing the compliance burden (SEC 2009). In spite of the likely audit efficiencies accrued and the success of regulatory reform in reducing compliance costs, the incremental cost of these audits are still economically significant.
5. A limitation of our study is our decision to exclude financial firms (SIC codes in the 6,000s).

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6. These statistics come from analysis of the *Audit Analytics* database. In our sample, which excludes financial firms, the Big 4 firms audit 23.5% of the companies and earn over 65% of the fees paid.
7. In additional testing, we separately examined new equity and debt. The coefficient on new equity was always significant (p-value = 0.00, two-tailed) and the coefficient was relatively stable at 0.74. New debt gained significance as the percentage of new debt increased. (10%, p-value = 0.136; 30%, p-value = 0.068, both are two-tailed).
8. We also examined changes in the audit committee chair. This was significant at the 5 per cent level with a coefficient of 0.96.
9. Our market capitalization results were substantially the same when we raised the market capitalization requirement to 90% of the $75m threshold.

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Appendix

Variable name	Variable description
Dependent variable	
OPIN404	= 1 if the client received its first 404 opinion on internal controls from the auditor, and 0 otherwise
Explanatory variables	
Restore credibility (RESTORE)	
MW302 (+)	= 1 if the 302 report on internal control over financial reporting last year discloses internal control issues, and 0 otherwise
SECCL (+)	= 1 if the company received an SEC comment letter in the 365 days before the auditor's report date, and 0 otherwise
RESANN (+)	= 1 if the company announces an restatement that reduces net income between auditor's report date from two years ago and the last year's auditor's report date, and 0 otherwise
Establish credibility (BUILD)	
NEWCAPITAL (+)	= 1 if the company issues new equity next year or if the company issues new debt next year that exceeds 20 per cent of total assets, and 0 otherwise
Organizational change (RESPOND)	
AUDITCOMMITTEE (+)	= 1 if the company has a change in the audit committee composition in the current year, 0 otherwise
EXECUTIVE (+)	= 1 if the company has a change in the CFO or CEO in the current year, 0 otherwise
Anticipated requirement (ANTICIPATE)	
MARKETCAP (+)	= 1 if the company's current market capitalization exceeds seventy-five percent of $75 million (threshold to be required to company with SOX 404 (b)), and 0 otherwise
Other controls	
SIZE (–)	= the natural logarithm of total assets
REVGROW (?)	= 1 if the revenue in the current year exceeds revenue in the prior year, 0 otherwise
DA (?)	= ratio of debt to assets
GCOPIN (?)	= 1 if the client received a going concern opinion in the preceding year, 0 otherwise
LOSS (?)	= 1 if the company had negative earnings, 0 otherwise
LNTENURE (?)	= the natural logarithm of the number of consecutive years the auditor has served the client
BUSYFYE (–)	= 1 if the client has a fiscal year end ending in the period one week prior to or one week following December 31, 0 otherwise
BIG4 (+)	= 1 if the auditor is PricewaterhouseCoopers, KPMG, Deloitte, or Ernst and Young, and 0 otherwise

Note: Continuous variables have been winsorized at the one percent and ninety-nine percent levels by year

Table AI.
variable descriptions

Corresponding author
David Hurtt can be contacted at: David_Hurtt@baylor.edu

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